

State of California
The Resources Agency

DEPARTMENT OF WATER RESOURCES
Division of Operations and Maintenance

STATE WATER PROJECT OPERATIONS DATA

For the month of:
October 2002

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Governor
State of California

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Secretary for Resources
The Resources Agency

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Director
Department of Water Resource

State of California
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The organization shown above represents staff and positions relevant to this report as of publication date on April 14, 2003. It is the department's policy to not show staff in "Acting" or "Temporary" positions.

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MONTHLY HIGHLIGHTS

The following highlights are activities or actions that impacted State Water Project operations during the month of October 2002.

Statewide precipitation was 5 percent of average for the 2002-2003 water year as of October 31. Statewide runoff was 50 percent of average for the water year. Precipitation percentages are used in this report to express historical and regional comparisons. Additional and more specific information is available via the internet at: http://cdec.water.ca.gov/snow_rain.html.

On October 31, total storage in major SWP reservoirs was about 2.12 MAF, compared with about 2.43 MAF at this time in 2001. The average storage in the major SWP reservoirs at the end of October was about 3.29 MAF. The October 31 storage at Lake Oroville was about 1.27 MAF as compared to 1.43 MAF last year. The State's share of San Luis Reservoir storage was about 226 TAF, as compared with 372 TAF at this time last year. On October 31, the combined storage in our southern reservoirs was about 626 TAF, compared with about 628 TAF at this time last year.

Through September, SWP water deliveries for 2002 were about 2,525 TAF. This is a combination of project, transfer, and exchange waters. This is 721 TAF more than delivered during the same period in 2001.

Concerns for water quality continued and SWP exports were limited for that reason and to maintain adequate Delta outflow. The daily 250-mg/l-chloride standard at Contra Costa Canal Pumping Plant was exceeded eight times despite improving conditions in Rock Slough and surrounding channels.

An experiment to acquire more data concerning fish migration and effect of the Delta Cross Channel was conducted late in the month.

Lake Oroville releases through the river valves were necessary during October for temperature control. A total of 27,000 AF of water was released during the last 15 days of the month.

Table 1. Antelope Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 22,566 ac-ft

October 2002

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs						Computed Inflow 1/	
				Regulated Release			Spill	Estimated Evaporation And Seepage 1/	Total Outflow 1/		
				Stream-flow Maint.	Water Supply Contract	Water Right					
Sep 30	4994.77	16,406									
1	4994.67	16,329	-77	20	0	0	0				
2	4994.59	16,267	-62	20	0	0	0				
3	4994.53	16,221	-46	20	0	0	0				
4	4994.47	16,175	-46	20	0	0	0				
5	4994.40	16,122	-53	20	0	0	0				
6	4994.34	16,076	-46	20	0	0	0				
7	4994.27	16,023	-53	20	0	0	0				
8	4994.22	15,985	-38	20	0	0	0				
9	4994.12	15,909	-76	20	0	0	0				
10	4994.05	15,856	-53	20	0	0	0				
11	4993.98	15,803	-53	20	0	0	0				
12	4993.90	15,743	-60	20	0	0	0				
13	4993.84	15,697	-46	20	0	0	0				
14	4993.76	15,637	-60	20	0	0	0				
15	4993.70	15,592	-45	20	0	0	0				
16	4993.62	15,533	-59	20	0	0	0				
17	4993.54	15,473	-60	20	0	0	0				
18	4993.48	15,428	-45	20	0	0	0				
19	4993.40	15,369	-59	20	0	0	0				
20	4993.34	15,324	-45	20	0	0	0				
21	4993.27	15,273	-51	20	0	0	0				
22	4993.20	15,221	-52	20	0	0	0				
23	4993.13	15,169	-52	20	0	0	0				
24	4993.06	15,118	-51	20	0	0	0				
25	4993.02	15,088	-30	9	0	0	0				
26	4993.01	15,081	-7	5	0	0	0				
27	4992.99	15,066	-15	5	0	0	0				
28	4992.94	15,030	-36	11	0	0	0				
29	4992.86	14,971	-59	20	0	0	0				
30	4992.80	14,928	-43	20	0	0	0				
31	4992.72	14,869	-59	20	0	0	0				
Total cfs-days				---	570	0	0	0	208	778	
Total ac-ft				-1,537	1,131	0	0	0	412	1,543	

1/ Values not available on a daily basis.

Table 2. Frenchman Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 55,477 ac-ft

October 2002

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs					Computed Inflow 1/	
				Regulated Release			Spill	Estimated Evaporation And Seepage 1/		
				Stream-flow Maint.	Water Supply Contract	Water Right				
Sep 30	5561.70	23,010								
1	5561.73	23,028	18	0	7	0	0			
2	5561.60	22,909	-119	0	7	0	0			
3	5561.50	22,817	-92	0	7	0	0			
4	5561.50	22,817	0	0	4	0	0			
5	5561.50	22,817	0	0	3	0	0			
6	5561.49	22,808	-9	0	3	0	0			
7	5561.42	22,744	-64	0	3	0	0			
8	5561.32	22,653	-91	2	0	0	0			
9	5561.41	22,735	82	2	0	0	0			
10	5561.35	22,681	-54	2	0	0	0			
11	5561.35	22,681	0	2	0	0	0			
12	5561.28	22,617	-64	2	0	0	0			
13	5561.23	22,572	-45	2	0	0	0			
14	5561.20	22,544	-28	2	0	0	0			
15	5561.18	22,526	-18	0	3	0	0			
16	5561.16	22,508	-18	0	6	0	0			
17	5561.10	22,454	-54	0	6	0	0			
18	5561.08	22,436	-18	0	5	0	0			
19	5561.07	22,427	-9	0	4	0	0			
20	5561.11	22,463	36	0	4	0	0			
21	5561.05	22,409	-54	0	2	0	0			
22	5561.09	22,445	36	2	0	0	0			
23	5561.05	22,409	-36	2	0	0	0			
24	5561.05	22,409	0	2	0	0	0			
25	5561.05	22,405	-4	2	0	0	0			
26	5561.06	22,414	9	2	0	0	0			
27	5561.04	22,400	-14	2	0	0	0			
28	5560.99	22,354	-46	2	0	0	0			
29	5560.96	22,327	-27	2	0	0	0			
30	5560.95	22,318	-9	2	0	0	0			
31	5560.95	22,318	0	2	0	0	0			
Total cfs-days				---	34	64	0	0	274	
Total ac-ft				-692	67	127	0	0	544	
									738	
									46	

1/ Values not available on a daily basis.

Table 3. Lake Davis

Daily Operation

(in acre-feet except as noted)

Capacity: 84,371 ac-ft

October 2002

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow in cfs					Computed Inflow 1/	
				Regulated Release			Spill	Estimated Evaporation And Seepage 1/		
				Stream-flow Maint.	Water Supply Contract	Water Right				
Sep 30	5762.43	41,962								
1	5762.42	41,935	-27	10	0	0	0			
2	5762.41	41,908	-27	10	0	0	0			
3	5762.38	41,826	-82	10	0	0	0			
4	5762.32	41,664	-162	10	0	0	0			
5	5762.30	41,610	-54	10	0	0	0			
6	5762.28	41,556	-54	10	0	0	0			
7	5762.27	41,529	-27	10	0	0	0			
8	5762.26	41,502	-27	8	0	0	0			
9	5762.24	41,448	-54	5	0	0	0			
10	5762.20	41,340	-108	7	0	0	0			
11	5762.20	41,340	0	10	0	0	0			
12	5762.16	41,233	-107	10	0	0	0			
13	5762.15	41,206	-27	10	0	0	0			
14	5762.13	41,152	-54	10	0	0	0			
15	5762.12	41,125	-27	10	0	1	0			
16	5762.11	41,099	-26	10	0	0	0			
17	5762.09	41,045	-54	10	0	0	0			
18	5762.07	40,991	-54	10	0	0	0			
19	5762.05	40,938	-53	10	0	0	0			
20	5762.03	40,884	-54	10	0	0	0			
21	5762.01	40,831	-53	10	0	0	0			
22	5762.00	40,804	-27	10	0	0	0			
23	5761.98	40,751	-53	10	0	0	0			
24	5761.95	40,671	-80	10	0	0	0			
25	5761.94	40,644	-27	10	0	1	0			
26	5761.92	40,591	-53	10	0	0	0			
27	5761.91	40,565	-26	10	0	0	0			
28	5761.90	40,538	-27	10	0	0	0			
29	5761.88	40,485	-53	10	0	0	0			
30	5761.86	40,432	-53	10	0	0	0			
31	5761.84	40,379	-53	10	0	0	0			
Total cfs-days				---	298	0	2	0	544	
Total ac-ft				-1,583	592	0	4	0	1,079	
									1,675	
									92	

1/ Values not available on a daily basis.

Table 4. Lake Oroville

Daily Operation

(in acre-feet except as noted)

Capacity: 3,537, 580 ac-ft

October 2002

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Outflow					Inflow	
				Hyatt Powerplant Generation 1/	Palermo Canal	Evaporation 2/	Release Through River Valves 3/	Total Outflow	Hyatt Powerplant Pumpback	Computed Inflow 4/
Sep 30	718.30	1,399,662								
1	717.88	1,396,211	-3,451	8,484	34	117	0	8,635	0	5,184
2	717.47	1,392,848	-3,363	6,627	34	205	0	6,866	0	3,503
3	717.21	1,390,719	-2,129	5,988	34	211	0	6,233	0	4,104
4	716.73	1,386,793	-3,926	8,118	34	152	0	8,304	0	4,378
5	715.95	1,380,430	-6,363	9,022	34	199	0	9,255	0	2,892
6	715.16	1,374,006	-6,424	9,685	34	169	0	9,888	0	3,464
7	714.71	1,370,355	-3,651	8,107	34	192	0	8,333	0	4,682
8	714.17	1,365,984	-4,371	8,607	34	214	0	8,855	0	4,484
9	714.02	1,364,771	-1,213	5,972	34	173	0	6,179	0	4,966
10	713.84	1,363,317	-1,454	6,625	33	179	0	6,837	0	5,383
11	713.47	1,360,331	-2,986	7,428	31	81	0	7,540	0	4,554
12	713.34	1,359,284	-1,047	6,437	31	138	0	6,606	0	5,559
13	713.09	1,357,269	-2,015	5,692	31	132	0	5,855	0	3,840
14	712.95	1,356,143	-1,126	4,953	32	173	0	5,158	0	4,032
15	712.63	1,353,569	-2,574	6,314	31	178	0	6,523	0	3,949
16	712.29	1,350,839	-2,730	6,552	32	97	0	6,681	0	3,951
17	711.98	1,348,353	-2,486	6,124	31	75	713	6,943	0	4,457
18	711.48	1,344,350	-4,003	6,210	32	63	1,488	7,793	0	3,790
19	710.71	1,338,200	-6,150	5,833	31	63	1,488	7,415	0	1,265
20	710.39	1,335,650	-2,550	4,972	31	69	1,488	6,560	0	4,010
21	709.71	1,330,242	-5,408	5,536	30	91	1,488	7,145	0	1,737
22	709.16	1,325,879	-4,363	5,703	30	114	1,488	7,335	0	2,972
23	708.51	1,320,736	-5,143	6,045	30	96	1,488	7,659	0	2,516
24	707.88	1,315,763	-4,973	6,156	30	45	1,488	7,719	0	2,746
25	707.27	1,310,960	-4,803	6,053	30	34	1,778	7,895	0	3,092
26	706.74	1,306,797	-4,163	5,893	30	67	2,272	8,262	0	4,099
27	705.86	1,299,905	-6,892	6,140	30	73	2,583	8,826	0	1,934
28	705.26	1,295,220	-4,685	5,796	30	89	2,479	8,394	0	3,709
29	704.60	1,290,079	-5,141	5,915	23	100	2,479	8,517	0	3,376
30	703.95	1,285,030	-5,049	5,930	20	106	2,479	8,535	0	3,486
31	703.34	1,280,304	-4,726	5,889	7	100	2,479	8,475	0	3,749
Total			-119,358	202,806	942	3,795	27,678	235,221	0	115,863

1/ Includes bypass flows

2/ Evaporation will be zero for days when there is precipitation or heavy overcast.

3/ Release of water through river valves for temperature control purposes.

4/ Does not include pumpback.

**Table 5. Thermalito Forebay
Including Diversion Pool and Power Canal**

Capacity: 25,120 ac-ft

Daily Operation
(in acre-feet except as noted)

October 2002

Date	Storage 1/	Storage Change	Inflow			Outflow					Losses (-) And Gains (+)
			Lake Oroville Releases 2/	Kelly Ridge Generation	Thermalito Pumping- Generating Plant Pumpback	Thermalito Pumping- Generating Plant Generation 3/	Butte County	Thermalito Irrigation District	Releases To River 4/	Hyatt Powerplant Pumpback	
Sep 30	24,183										
1	23,588	-595	8,484	14	0	7,936	0	8	1,261	0	112
2	23,816	228	6,627	0	0	5,214	0	8	1,253	0	76
3	23,317	-499	5,988	0	0	5,265	0	8	1,255	0	41
4	23,816	499	8,118	0	0	6,531	0	8	1,255	0	175
5	23,922	106	9,022	0	0	7,858	0	8	1,259	0	209
6	23,604	-318	9,685	0	0	8,713	0	8	1,259	0	-23
7	23,906	302	8,107	0	0	6,899	0	8	1,259	0	361
8	23,523	-383	8,607	0	0	8,080	0	8	1,263	0	361
9	23,776	253	5,972	0	0	4,572	0	8	1,257	0	118
10	23,976	200	6,625	0	0	5,378	0	8	1,267	0	228
11	23,588	-388	7,428	0	0	6,796	0	8	1,271	0	259
12	23,704	116	6,437	0	0	5,553	0	8	1,269	0	509
13	23,909	205	5,692	488	0	4,923	0	8	1,267	0	223
14	23,698	-211	4,953	508	0	4,556	0	8	1,271	0	163
15	23,605	-93	6,314	454	0	5,853	0	8	1,265	0	265
16	22,986	-619	6,552	540	0	6,641	0	8	1,267	0	205
17	22,671	-315	6,837	490	0	6,561	0	8	1,263	0	190
18	24,389	1,718	7,698	503	0	5,486	0	8	1,263	0	274
19	24,697	308	7,321	503	0	6,481	0	8	1,271	0	244
20	24,682	-15	6,460	510	0	5,965	0	8	1,267	0	255
21	24,814	132	7,024	500	0	6,363	0	8	1,259	0	238
22	24,691	-123	7,191	512	0	6,813	0	8	1,258	0	253
23	24,490	-201	7,533	508	0	7,245	0	8	1,251	0	262
24	24,651	161	7,644	508	0	7,035	0	8	1,260	0	312
25	24,641	-10	7,831	510	0	7,409	1	8	1,257	0	324
26	24,922	281	8,165	506	0	7,671	1	8	1,260	0	550
27	24,836	-86	8,723	507	0	8,688	1	8	1,259	0	640
28	24,742	-94	8,275	507	0	8,279	1	8	1,259	0	671
29	24,695	-47	8,394	507	0	8,339	1	8	1,259	0	659
30	24,626	-69	8,409	508	0	8,380	1	8	1,257	0	660
31	24,554	-72	8,368	524	0	8,336	1	8	1,259	0	640
Total		371	230,484	9,607	0	209,819	7	248	39,100	0	9,454

1/ Sum of Thermalito Forebay and Diversion Pool.

2/ Sum of releases from Lake Oroville through Hyatt plant, and spill.

3/ Includes Bypass flows at Thermalito.

4/ The sum of the flows from fish barrier dam and the fish hatchery.

Table 6. Thermalito Afterbay

Daily Operation

(in acre-feet except as noted)

Capacity: 57,040 ac-ft

October 2002

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow					Losses (-) and Gains (+)	Total Releases to River 2/
				Thermalito Pumping-Generating Plant Generation 1/	Sutter Butte Canal	Western Canal Lateral	Richvale Canal	Western Canal	Afterbay River Outlet	Thermalito Pumping-Generating Plant Pumpback		
Sep 30	128.16	26,312										
1	128.61	27,689	1,377	7,936	1,388	0	488	115	4,245	0	-323	5,506
2	128.20	26,433	-1,256	5,214	1,361	0	551	115	4,245	0	-198	5,498
3	127.81	25,264	-1,169	5,265	1,341	0	563	113	4,245	0	-172	5,500
4	127.80	25,235	-29	6,531	1,301	0	599	111	4,245	0	-304	5,500
5	128.13	26,222	987	7,858	1,400	0	633	115	4,245	0	-478	5,504
6	128.72	28,031	1,809	8,713	1,426	0	645	117	4,245	0	-471	5,504
7	128.73	28,062	31	6,899	1,420	0	643	119	4,245	0	-441	5,504
8	129.09	29,194	1,132	8,080	1,466	0	645	173	4,265	0	-399	5,528
9	128.38	26,981	-2,213	4,572	1,569	0	639	200	4,245	0	-132	5,502
10	127.83	25,324	-1,657	5,378	1,718	0	641	238	4,245	0	-193	5,512
11	127.61	24,675	-649	6,796	1,753	0	642	266	4,245	0	-539	5,516
12	127.25	23,630	-1,045	5,553	1,728	0	641	274	3,749	0	-206	5,018
13	126.76	22,244	-1,386	4,923	1,674	0	642	272	3,352	0	-369	4,619
14	126.27	20,897	-1,347	4,556	1,646	0	642	300	3,035	0	-280	4,306
15	126.30	20,978	81	5,853	1,654	0	702	314	2,757	0	-345	4,022
16	126.59	21,772	794	6,641	1,672	0	720	314	2,777	0	-364	4,044
17	126.89	22,608	836	6,561	1,682	0	722	314	2,777	0	-230	4,040
18	126.78	22,299	-309	5,486	1,736	0	718	306	2,777	0	-258	4,040
19	126.97	22,833	534	6,481	1,829	0	724	337	2,777	0	-280	4,048
20	126.99	22,890	57	5,965	1,841	0	722	353	2,757	0	-235	4,024
21	127.14	23,316	426	6,363	1,815	0	724	355	2,776	0	-267	4,035
22	127.39	24,034	718	6,813	1,905	11	722	379	2,776	0	-302	4,034
23	127.64	24,763	729	7,245	1,982	18	724	748	2,757	0	-287	4,008
24	127.64	24,763	0	7,035	1,976	16	726	1,172	2,757	0	-388	4,017
25	127.65	24,792	29	7,409	1,984	16	722	1,686	2,776	0	-196	4,033
26	127.60	24,646	-146	7,671	1,857	16	720	2,023	2,757	0	-444	4,017
27	127.85	25,383	737	8,688	1,803	16	722	2,083	2,776	0	-551	4,035
28	128.01	25,861	478	8,279	1,777	16	668	2,142	2,776	0	-422	4,035
29	128.21	26,464	603	8,339	1,742	16	642	2,222	2,776	0	-338	4,035
30	128.41	27,073	609	8,380	1,734	16	643	2,222	2,757	0	-399	4,014
31	128.62	27,720	647	8,336	1,710	14	625	2,202	2,777	0	-361	4,036
Total			1,408	209,819	51,890	155	20,560	21,700	103,934	0	-10,172	143,034

1/ Includes Bypass flows at Thermalito.

2/ The sum of the flows from the fish barrier dam, fish hatchery, and afterbay river outlet.

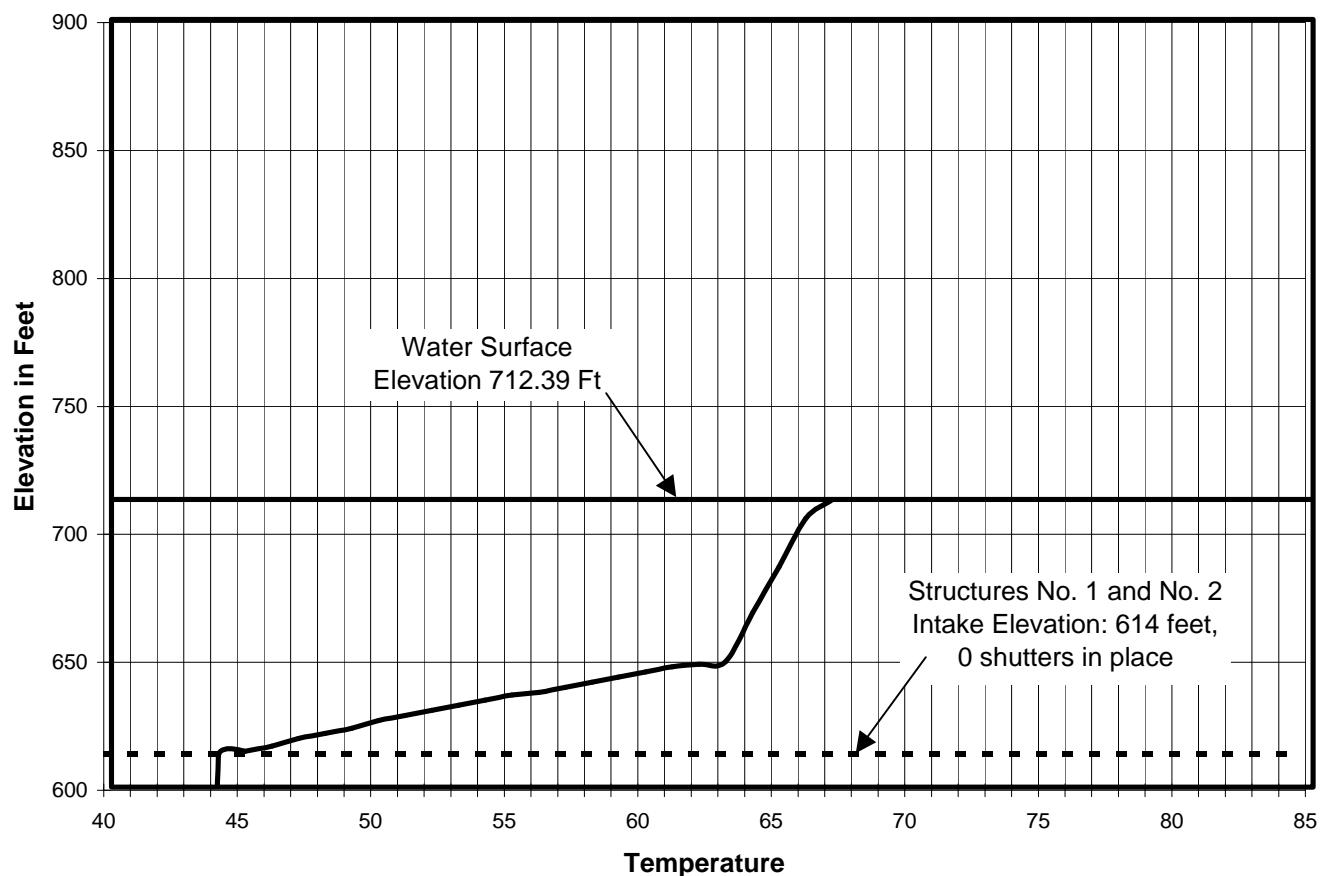
Table 7. Oroville-Thermalito Complex

Water Temperature Data

(in degrees Fahrenheit)

October 2002

Date	Mean Daily Temperature	
	Thermalito Afterbay Outlet	Fish Hatchery
1	58	53
2	57	54
3	56	53
4	57	52
5	58	53
6	59	54
7	59	55
8	59	55
9	59	55
10	59	55
11	59	55
12	59	56
13	59	56
14	59	56
15	59	56
16	59	57
17	58	57
18	58	56
19	58	56
20	59	56
21	59	55
22	59	56
23	58	56
24	57	56
25	57	57
26	57	57
27	57	56
28	57	56
29	57	56
30	57	56
31	56	56

**Lake Oroville Temperature Profile
on October 16, 2002**

Note: Water surface elevations on Table 4 are taken at Oroville Dam at midnight and may differ slightly from those shown on this table which are normally taken at mid-day and upstream from Oroville Dam.

Table 8. North Bay Aqueduct
Delta Field Division, Monthly Deliveries

(In acre-feet)

October 2002

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries				
	Beginning and Ending					Entitlement		Permit		
	No.	Structure	Mile			M & I	Benicia			
1	1	Barker Slough Pumping Plant	0.17	(Into the North Bay Aqueduct)	4,160	487	687	697		
		Travis Surge Tank	8.78							
			8.80	Solano County Water Agency Travis Turnout	697					
			10.54	Solano County Water Agency Fairfield / Vacaville 24"	487					
				Solano County Water Agency Fairfield / Vacaville 42"	687					
			17.00	Solano County Water Agency Central Solano	Stub					
2	3A	Cordelia Forebay	21.23			1,078	1,078	1,085		
		Cordelia Pumping Plant & Cordelia Spillway	21.30		2,513					
3B	2	Napa Pipeline	21.33	Solano County Water Agency Vallejo	1,085	4	126	220		
				Solano County Water Agency Benicia	1,078					
		Cordelia Surge Tank	23.33							
		Creston Surge Tank Connection	25.65							
			26.95	Napa County Flood Control & WCD American Canyon 2	4					
			27.27	Napa County Flood Control & WCD American Canyon 3	0					
		Napa Terminal Tank	27.58	City of Napa	126					
			27.60	Napa County Flood Control & WCD American Canyon 1	220					

Table 9. Delta Field Division Plant Data

(in acre-feet)

October 2002

Date	North Bay Aqueduct		California Aqueduct		South Bay Aqueduct			
	Barker Slough Pumping Plant	Cordelia Pumping Plant	Banks Pumping Plant		South Bay Pumping Plant	Del Valle Pumping Plant		Gravity Flow Through Plant Into Aqueduct
			Total	SWP		Into Lake	Into Aqueduct	
1	156	66	4,929	4,532	337	0	0	0
2	166	76	4,532	4,135	349	0	0	0
3	133	62	3,642	3,245	318	0	0	0
4	137	80	3,916	3,519	350	0	0	0
5	122	65	2,695	2,298	349	0	0	0
6	131	80	2,478	2,478	312	0	0	0
7	138	83	1,968	1,571	349	0	0	0
8	175	99	1,720	1,323	328	0	0	0
9	162	98	1,827	1,430	349	0	0	13
10	142	85	1,826	1,429	306	0	0	15
11	153	99	1,817	1,420	324	0	0	10
12	159	101	1,661	1,264	337	0	0	5
13	157	103	2,204	2,204	316	0	0	0
14	151	95	992	928	331	0	0	0
15	145	88	1,795	1,795	298	0	0	0
16	138	86	1,801	1,801	149	0	0	0
17	143	91	1,815	1,815	189	0	0	2
18	136	87	2,325	2,325	234	0	0	0
19	133	85	2,102	2,102	349	0	0	35
20	129	88	2,083	2,083	349	0	0	118
21	140	87	3,135	3,135	349	0	0	178
22	144	96	4,464	4,464	349	0	0	178
23	140	86	3,872	2,845	349	0	0	163
24	120	78	4,002	2,975	349	0	0	211
25	102	58	3,498	2,471	349	0	0	238
26	118	72	3,520	2,493	349	0	0	240
27	118	72	4,782	3,755	363	0	0	236
28	118	70	5,621	4,594	325	0	0	216
29	104	54	8,856	3,728	234	0	0	242
30	88	68	8,225	3,097	162	0	0	246
31	62	55	8,167	4,066	0	0	0	261
Total	4,160	2,513	106,270	81,320	9,401	0	0	2,608

Table 10. Clifton Court Forebay

Daily Operation of Gates

October 2002

Date	Time								Amount of inflow in Acre-Feet
	Opened	Closed	Opened	Closed	Opened	Closed	Opened	Closed	
1	0:01	6:55							4,943
2	0:31	5:50	13:30	16:00					4,974
3	2:30	7:55							3,961
4	2:45	6:30							3,951
5	4:06	9:20							2,565
6	8:00	10:50	14:00	18:05					2,562
7	6:00	11:50							1,982
8	5:30	9:30							1,945
9	6:14	16:30	19:20	20:40					1,981
10	0:01	2:30							1,964
11	6:30	10:15							1,981
12	0:01	4:15							1,975
13	0:01	3:55	11:40	13:00					1,974
14	1:00	4:30							1,967
15	0:01	4:00							1,968
16	1:30	4:00							1,942
17	4:00	8:30							1,948
18	3:30	7:00							1,958
19	4:40	9:45							1,950
20	2:50	8:15							1,974
21	2:15	12:00							2,954
22	3:00	11:30							4,554
23	3:30	10:00							3,955
24	0:01	1:15	8:20	15:45					3,842
25	0:01	2:00	6:40	10:20					3,546
26	0:15	2:15	7:05	15:30					3,567
27	0:01	2:00	6:45	10:38					4,333
28	0:20	4:30	7:45	15:00					5,923
29	0:01	5:50	8:30	15:30					8,896
30	0:01	6:02	9:30	14:35					7,925
31	0:15	6:00	11:45	16:10					7,933
Total inflow for the month in AF:									107,893

Table 11. Governor Edmund G. Brown California Aqueduct
 Delta Field Division, Monthly Deliveries

(In acre-feet)

October 2002

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Entitlement	USBR	Local	Loan Water	Dry Year Purchase		
	No.	Structure	Mile									
1	Banks Pumping Plant	3.32			106,270		111	111				
	South Bay Pumping Plant	4.49	Bethany Reservoir inlet		9,401							
	Check No. 1	5.95										
	2	Check No. 2	12.01									
	3	12.47	Musco Olive		111							
		Check No. 3	18.29									
	4	22.16	Tracy Golf & Country Club		0							
		Check No. 4	23.99									
	5	Check No. 5	29.73			21	113	19	0			
	6	Check No. 6	34.24									
	7	35.22	Turlock Fruit Company Inflow		0	21	113	19	0			
		Check No. 7	39.91									
	8	42.46	Oak Flat Water District-A		21							
		42.9	Western Hills WD		113							
		43.81	Oak Flat Water District-B		19							
		44.64	Oak Flat Water District-C		0							
		Check No. 8	45.97									
	9	46.18	Oak Flat Water District-D		0	40	0	0	0	0		
			Oak Flat Totals:		40							
	Check No. 9	51.3				9	9	9	9	9		
	10	Check No. 10	56.86									
	11	Check No. 11	61.4									
	12	66.14	Veteran's Cemetery		9							
		Check No. 12	66.71		88,758							

Table 12. South Bay Aqueduct
Delta Field Division, Monthly Deliveries

(In acre-feet)

October 2002

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries						
	Beginning and Ending					Entitle-ment	Purchase Pool A	Purchase Pool B	Local	Recre-ation		
	No.	Structure	Mile									
1	1	South Bay Pumping Plant	0.00	(into South Bay Aqueduct)	9,401	4	1,044	1,044	1,044	1,044		
			3.17	Granite - Vasco Rd. (Temp.)	0							
			3.18	Oakland Scavenger Zone 7	4							
	2	Check No. 1	3.91									
2	3		7.21	Zone 7 Altamont	6	6	1,044	1,044	1,044	1,044		
		Check No. 3	9.49	Zone 7 Patterson Stored Exchange	0							
				Zone 7 Patterson Project Water	1,044							
4	6	4	Check No. 4	10.68		7	10	10	10	10		
		5	Check No. 5	12.29								
				13.55	Zone 7 Wente #1							
				14.16	Zone 7 Wente #2							
				14.31	Ising Project Water							
	7	Check No. 6	14.65				13	13	13	13		
				14.78	Zone 7 Arroyo Mocho Project Water							
	8	Check No. 7	16.38			2	28	28	28	28		
				16.57	Zone 7 Wente #3							
				16.69	Zone 7 Norman Nursery							
				16.70	Zone 7 Wente #4							
					Zone 7 Concannon Project Water							
5	8	Del Valle Branch Pipeline Junction	18.63	(Pumped into Lake Del Valle)	0	15	426	426	426	426		
				(Flow into South Bay Aqueduct)	2,608							
					Arroyo Valle #1 & #2 Project Water							
					Arroyo Valle #1 & #2 Inflow Released							
					Lake Del Valle Recreation							
6	8				Zone 7 Wente #5	30	2,385	2,385	2,385	2,385		
					So. Livermore Project							
					So. Livermore Inflow Released							
7	8	La Costa Tunnel	19.20	So. Livermore Stored Exchanged	0	245	948	948	948	948		
			19.21	Zone 7 - Kalthrof Detjens	245							
					ACWD Vallecitos Project Water							
8	8	Mission Tunnel	22.50	ACWD Vallecitos Inflow Released	106	106	106	106	106	106		
			25.97	City of San Francisco San Antonio	0							
				ACWD - Bayside 1 & 2 Project Water:	2,353							
9	8			Inflow Released	0	2,353	2,819	2,819	2,819	2,819		
				Stored Exchange:	0							
		Santa Clara Pipeline	35.86	S.C.V.W.D. Meter	2,819							

Table 13. Lake Del Valle

Daily Operation

Capacity: 77,106 ac-ft

October 2002

Date	Water Surface Elevation (feet)	Storage	Storage Change	Inflow		Outflow					Precipitation (inches)
				Natural 1/	From South Bay Aqueduct	Arroyo Valle	South Bay Aqueduct	Recreation Deliveries 2/	Evaporation	Total Outflow	
Sep 30	691.47	32,278									
1	691.45	32,266	-12	-2	0	0	0	0	10	10	0.00
2	691.44	32,260	-6	4	0	0	0	0	10	10	0.00
3	691.41	32,241	-19	-6	0	0	0	0	13	13	0.00
4	691.40	32,235	-6	6	0	0	0	0	12	12	0.00
5	691.37	32,217	-18	-8	0	0	0	0	10	10	0.00
6	691.37	32,278	61	74	0	0	0	0	13	13	0.00
7	691.38	32,223	-55	-42	0	0	0	0	13	13	0.00
8	691.36	32,210	-13	0	0	0	0	0	13	13	0.00
9	691.32	32,168	-42	-17	0	0	13	0	13	25	0.00
10	691.30	32,174	6	32	0	0	15	0	11	26	0.00
11	691.26	32,149	-25	-8	0	0	10	0	7	17	0.00
12	691.23	32,131	-18	-7	0	0	5	0	7	11	0.00
13	691.22	32,124	-7	3	0	0	0	0	10	10	0.00
14	691.20	32,112	-12	-2	0	0	0	0	10	10	0.00
15	691.20	32,112	0	9	0	0	0	0	9	9	0.00
16	691.19	32,106	-6	0	0	0	0	0	6	6	0.00
17	691.17	32,032	-74	-66	0	0	2	0	6	8	0.00
18	691.16	32,088	56	61	0	0	0	0	5	5	0.00
19	691.10	32,051	-37	3	0	0	35	0	4	40	0.00
20	690.89	31,922	-129	-1	0	0	118	1	9	128	0.00
21	690.56	31,721	-201	-18	0	0	178	1	4	183	0.00
22	690.23	31,521	-200	-16	0	0	178	1	4	184	0.00
23	689.93	31,339	-182	-14	0	0	163	1	5	168	0.00
24	689.62	31,146	-193	25	0	0	211	1	5	218	0.00
25	689.27	30,943	-203	39	0	0	238	1	3	242	0.00
26	688.90	30,722	-221	25	0	0	240	1	5	246	0.00
27	688.54	30,509	-213	29	0	0	236	1	5	242	0.00
28	688.21	30,308	-201	21	0	0	216	1	5	222	0.00
29	687.83	30,091	-217	33	0	0	242	1	7	250	0.00
30	687.41	29,845	-246	8	0	0	246	1	7	254	0.00
31	687.03	29,625	-220	49	0	0	261	1	7	269	0.00
Total				-2,653	212	0	0	2,608	12	245	2,865
1/ Total inflow from stream gaging station above Lang Canyon and accretions/depletions.											
2/ To East Bay Regional Park District.											
NR=No Records											

Table 14. Consolidated State-Federal O'Neill Forebay

Daily Operations

October 2002

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

State of California
The Resources Agency
Department of Water Resources
State Water Project

Date	Water Surface Elevation (in feet)	Storage (ac-ft)	Storage Change	Inflow (cfs)				Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)	
				Pump In 1/	O'Neill Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	California Aqueduct	O'Neill Pumping Generating Plant (Generation)	Gianelli Pumping Generating Plant (Pumped)	Dos Amigos Pumping Plant	Deliveries 2/		
Sep 30	220.61	44,740											
1	221.54	47,178	2,438	0	1,893	3,573	2,165	0	1,925	4,491	11	25	
2	221.18	46,233	-945	0	1,827	3,031	1,977	0	2,475	4,367	11	-458	
3	221.71	47,625	1,392	0	1,767	3,022	1,249	0	1,100	4,179	11	-46	
4	221.97	48,308	683	0	1,753	2,604	1,989	0	1,650	4,164	12	-176	
5	220.06	43,308	-5,000	0	1,782	692	1,320	0	1,467	4,983	11	146	
6	219.98	43,100	-208	0	1,689	3,563	1,088	0	1,375	5,143	11	84	
7	221.33	46,626	3,526	0	1,587	5,727	812	0	2,017	4,372	11	52	
8	222.14	48,756	2,130	0	1,502	4,067	698	0	1,569	3,815	11	202	
9	221.61	47,362	-1,394	0	1,457	3,243	736	0	2,270	3,761	12	-96	
10	221.65	47,467	105	0	1,497	3,242	706	0	2,072	3,354	11	45	
11	222.24	49,022	1,555	0	1,487	4,242	619	0	1,470	3,996	10	-88	
12	221.90	48,124	-898	0	1,521	3,099	616	0	1,486	3,976	12	-215	
13	220.45	44,322	-3,802	0	1,683	2,167	868	0	2,047	4,445	11	-132	
14	221.38	46,758	2,436	0	1,693	3,396	392	0	645	3,502	11	-95	
15	221.94	48,229	1,471	0	1,765	2,815	843	0	1,512	2,935	12	-222	
16	221.95	48,255	26	0	1,840	2,813	865	0	1,725	3,540	11	-229	
17	222.00	48,385	130	0	2,023	2,479	652	0	1,936	3,185	11	44	
18	223.08	51,260	2,875	0	2,276	3,535	999	0	2,418	3,060	11	128	
19	223.60	52,652	1,392	0	2,498	2,655	690	0	1,797	3,457	10	123	
20	219.72	42,428	-10,224	0	2,582	0	710	0	4,870	4,040	12	475	
21	221.34	46,653	4,225	0	2,438	3,626	1,101	0	1,974	3,171	10	120	
22	222.04	48,491	1,838	0	2,025	2,280	2,079	0	2,494	3,207	11	255	
23	222.35	49,314	823	0	2,298	1,618	1,709	0	1,845	3,554	10	199	
24	221.95	48,255	-1,059	0	2,567	1,080	1,449	0	2,670	3,285	10	335	
25	223.43	52,196	3,941	0	2,711	3,596	1,377	0	2,587	3,180	12	82	
26	224.50	55,076	2,880	0	2,959	2,645	1,339	0	2,328	3,375	11	223	
3/ 27	221.01	45,787	-9,289	0	3,034	0	2,156	0	6,134	4,034	12	307	
28	224.22	54,320	8,533	0	3,026	4,133	2,062	0	2,600	2,615	11	307	
29	222.97	50,966	-3,354	0	1,566	0	3,782	510	3,945	2,953	12	381	
30	222.60	49,980	-986	0	1,663	0	3,959	496	3,449	2,501	12	339	
31	221.62	47,388	-2,592	0	1,671	0	3,650	491	4,114	2,456	11	444	
Total				2,648	0	62,080	78,943	44,657	1,497	71,966	113,096	345	2,559
Mean cfs				---	0	2,003	2,547	1,441	48	2,321	3,648	11	83
Acre-feet				2,648	0	123,389	156,580	88,758	2,970	143,252	224,656	685	5,484

1/ Pump-in located at Mile 79.67R.

2/ Includes 105 AF delivered to DFG at O'Neill Forebay and 11 AF to Parks and Recreation and 569 AF to SLWD.

3/ 25 hr.; the factor for converting CFS/AF is 2.0661 on 10/27/02.

Table 15. Consolidated State-Federal San Luis Reservoir

Daily Operations

October 2002

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 2,027,835 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)	Outflow (cfs)			Computed Losses (-) Gains (+) (cfs)
				Gianelli Pumping Generating Plant (Pumped)	Gianelli Pumping Generating Plant (Generation)	Pacheco Tunnel 1/	Parks and Rec. Del.	
Sep 30	419.74	688,435						
1	419.43	685,705	-2,730	1,925	3,573	359	0	631
2	419.12	682,980	-2,725	2,475	3,031	347	0	-471
3	418.68	679,118	-3,862	1,100	3,022	332	0	307
4	418.33	676,052	-3,066	1,650	2,604	339	0	-253
5	418.46	677,191	1,139	1,467	692	334	0	133
6	417.85	671,856	-5,335	1,375	3,563	332	0	-170
7	416.98	664,276	-7,580	2,017	5,727	298	0	186
8	416.40	659,241	-5,035	1,569	4,067	342	0	302
9	415.99	655,690	-3,551	2,270	3,243	337	0	-480
10	415.68	653,010	-2,680	2,072	3,242	357	0	176
11	414.97	646,887	-6,123	1,470	4,242	346	0	31
12	414.51	642,931	-3,956	1,486	3,099	359	0	-22
13	414.45	642,416	-515	2,047	2,167	349	0	209
14	413.73	636,245	-6,171	645	3,396	336	0	-24
15	413.45	633,852	-2,393	1,512	2,815	356	0	453
16	412.93	629,415	-4,437	1,725	2,813	341	0	-808
17	412.69	627,371	-2,044	1,936	2,479	323	0	-165
18	412.35	624,480	-2,891	2,418	3,535	314	0	-27
19	412.06	622,018	-2,462	1,797	2,655	305	0	-78
20	413.04	630,353	8,335	4,870	0	286	0	-382
21	412.54	626,095	-4,258	1,974	3,626	231	0	-264
22	412.52	625,925	-170	2,494	2,280	226	0	-74
23	412.47	625,500	-425	1,845	1,618	218	0	-223
24	412.69	627,371	1,871	2,670	1,080	214	0	-433
25	412.39	624,820	-2,551	2,587	3,596	203	0	-74
26	412.23	623,461	-1,359	2,328	2,645	188	0	-180
2/ 27	413.54	634,621	11,160	6,134	0	160	0	-348
28	413.09	630,779	-3,842	2,600	4,133	161	0	-243
29	413.89	637,615	6,836	3,945	0	199	0	-300
30	414.55	643,275	5,660	3,449	0	238	0	-357
31	415.30	649,730	6,455	4,114	0	154	1	-705
Total			-38,705	71,966	78,943	8,884	1	-3,653
Mean cfs			---	2,321	2,547	287	0	-118
Acre-feet			-38,705	143,252	156,580	17,639	1	-7,737

1/ Pacheco Tunnel, San Felipe Split; Santa Clara: 15,097 AF, San Benito: 2,542 AF.

2/ 25 hr.; the factor for converting CFS/AF is 2.0661 on 10/27/02.

Table 16. San Luis Field Division Plant Data

(in acre-feet)

October 2002

Date	Dos Amigos Pumping Plant		Gianelli Pumping - Generating Plant				San Felipe Project
	Total Pumping	SWP Pumping 1/ 2/	Total Generation	SWP Generation 1/ 2/	Total Pumping	SWP Pumping 1/ 2/	Federal
1	8,907	8,516	7,087	7,087	3,818	-64	713
2	8,662	8,271	6,012	6,012	4,909	-128	689
3	8,290	7,899	5,995	5,995	2,182	-27	659
4	8,260	7,869	5,165	5,165	3,273	-82	673
5	9,883	9,492	1,372	1,372	2,909	-39	663
6	10,202	10,202	7,068	7,068	2,727	-74	659
7	8,671	8,280	11,360	11,360	4,000	-50	591
8	7,568	7,177	8,066	8,066	3,112	-25	679
9	7,459	7,068	6,433	6,433	4,503	1,128	669
10	6,652	6,261	6,430	6,430	4,109	1,177	708
11	7,927	7,536	8,414	8,414	2,916	-66	686
12	7,886	7,495	6,146	6,146	2,947	-73	712
13	8,816	8,816	4,298	4,298	4,061	-89	693
14	6,946	6,888	6,736	6,736	1,279	-30	667
15	5,821	5,821	5,584	5,584	2,999	-85	706
16	7,021	7,021	5,579	5,579	3,422	-129	677
17	6,318	6,318	4,917	4,917	3,841	276	640
18	6,070	6,070	7,011	7,011	4,797	1,296	623
19	6,856	6,856	5,266	5,266	3,564	-66	604
20	8,014	8,014	0	0	9,660	149	567
21	6,289	6,289	7,192	7,192	3,916	-98	459
22	6,361	6,361	4,522	4,522	4,946	162	449
23	7,049	7,049	3,209	3,209	3,660	68	432
24	6,516	6,516	2,142	2,142	5,296	-23	425
25	6,307	6,307	7,132	7,132	5,131	150	402
26	6,694	6,694	5,246	5,246	4,618	19	372
27	8,335	8,335	0	0	12,674	150	331
28	5,187	5,187	8,198	8,198	5,157	612	319
29	5,858	5,858	0	0	7,825	442	395
30	4,960	4,960	0	0	6,841	27	472
31	4,871	4,871	0	0	8,160	-234	305
Total	224,656	220,297	156,580	156,580	143,252	4,274	17,639

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

2/ Provisional, subject to change.

Table 17. Consolidated State-Federal Los Banos Reservoir

Daily Operations

October 2002

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Date	Water Surface Elev. (in feet)	Storage (ac-ft)	Storage Change (ac-ft)	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft)
					Spill	Outlet	
Sep 30	324.13	18,892					
1	324.10	18,878	-14	0	0	0	-14
2	324.06	18,860	-18	0	0	0	-18
3	324.04	18,851	-9	0	0	0	-9
4	324.03	18,847	-4	0	0	0	-4
5	324.02	18,842	-5	0	0	0	-5
6	324.01	18,838	-4	0	0	0	-4
7	324.00	18,833	-5	0	0	0	-5
8	323.99	18,829	-4	0	0	0	-4
9	323.98	18,824	-5	0	0	0	-5
10	323.95	18,811	-13	0	0	0	-13
11	323.93	18,802	-9	0	0	0	-9
12	323.92	18,798	-4	0	0	0	-4
13	323.91	18,793	-5	0	0	0	-5
14	323.90	18,789	-4	0	0	0	-4
15	323.87	18,775	-14	0	0	0	-14
16	323.85	18,766	-9	0	0	0	-9
17	323.84	18,762	-4	0	0	0	-4
18	323.83	18,757	-5	0	0	0	-5
19	323.82	18,753	-4	0	0	0	-4
20	323.82	18,753	0	0	0	0	0
21	323.81	18,748	-5	0	0	0	-5
22	323.79	18,740	-8	0	0	1	-6
23	323.76	18,726	-14	0	0	0	-14
24	323.75	18,722	-4	0	0	0	-4
25	323.74	18,717	-5	0	0	0	-5
26	323.73	18,713	-4	0	0	0	-4
27	323.72	18,708	-5	0	0	0	-5
28	323.72	18,708	0	0	0	0	0
29	323.71	18,704	-4	0	0	0	-4
30	323.68	18,690	-14	0	0	0	-14
31	323.67	18,686	-4	0	0	0	-4
Total			-206	0	0	1	-205
Mean cfs			---	0	0	0	---
Acre-feet			-206	0	0	1	-205

Table 18. Consolidated State-Federal Little Panoche Reservoir

Daily Operations

October 2002

United States

Department of the Interior

Bureau of Reclamation

Central Valley Project

State of California

The Resources Agency

Department of Water Resources

State Water Project

Capacity: 5,580 ac-ft

Date	Water Surface Elev. (in feet)	Storage (ac-ft) 1/	Storage Change (ac-ft) 1/	Estimated Inflow (cfs)	Estimated Outflow (cfs)		Computed Losses (-) Gains (+) (ac-ft) 1/
					Spill	Outlet	
Sep 30	600.30	699					
1	600.33	701	2	0	0	0	
2	Not Observed			0	0	0	
3	Not Observed			0	0	0	
4	600.20	694	-7	0	0	0	
5	Not Observed			0	0	0	
6	Not Observed			0	0	0	
7	Not Observed			0	0	0	
8	Not Observed			0	0	0	
9	Not Observed			0	0	0	
10	Not Observed			0	0	0	
11	600.20	694	0	0	0	0	
12	Not Observed			0	0	0	
13	Not Observed			0	0	0	
14	Not Observed			0	0	0	
15	Not Observed			0	0	0	
16	Not Observed			0	0	0	
17	Not Observed			0	0	0	
18	600.00	684	-10	0	0	0	
19	Not Observed			0	0	0	
20	Not Observed			0	0	0	
21	Not Observed			0	0	0	
22	Not Observed			0	0	0	
23	Not Observed			0	0	0	
24	Not Observed			0	0	0	
25	Not Observed			0	0	0	
26	Not Observed			0	0	0	
27	600.00	684		0	0	0	
28	600.00	684		0	0	0	
29	600.00	684		0	0	0	
30	Not Observed			0	0	0	
31	600.00	684		0	0	0	
Total			-15	0	0	0	---
Mean cfs			---	0	0	0	---
Acre-feet			-15	0	0	0	-15

1/ Not available on a daily basis

Table 19a. Governor Edmund G. Brown California Aqueduct
San Luis Field Division, Monthly Deliveries

(In acre-feet)

October 2002

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
		Beginning and Ending				USBR	Transfer 1/	DWR Recreation	USBR Recreation		
	No.	Structure	Mile								
2B	12	Check No. 12	66.71		88,758						
3A		San Luis Reservoir		Department of Parks and Recreation	1	15,097		1	0		
				San Felipe Division Santa Clara Water District	15,097						
				San Felipe Division San Benito Water District	2,542	2,542		6	5		
				Department of Parks and Recreation	11						
3	13	O'Neill Forebay	70.85	Cattle Program	0			0	0		
				Department of Fish & Game	105						
				70.91							
			Thru 85.08	San Luis Water District	569	569		58	47		
				(Floodwater Inflow)	0						
				Reach 3 Subtotal:	685	569	0	64	52		
			Check No. 13								
			86.73	Dos Amigos Pumping Plant	224,656						
4	14		89.03 Thru 94.06	San Luis Water District	2,631	2,631					
				Pacheco Water District	90						
				Panoche Water District	42						
			89.70	City of Dos Palos	146						
			Check No. 14	95.06							
	15		98.15 Thru 104.20	San Luis Water District	232	232					
				Panoche Water District	782						
				(Floodwater Inflow)	0						
			102.64	Broadview Water District	4						
			105.22 Thru 108.64	Westlands Water District	4,229						
				Check No.15	108.50						
			San Felipe Division Total:	17,639	17,639	0	0	0	0		
			Pacheco Water District Total:	90	90	0	0	0	0		
			Broadview Water District Total:	4	4	0	0	0	0		
			City of Dos Palos Total:	146	146	0	0	0	0		
			SLWD Reach 4 Subtotal:	2,863	2,863	0	0	0	0		
			Panoche Water District Total:	824	824	0	0	0	0		
			SLWD Total:	3,432	3,432	0	0	0	0		
			Westlands WD Reach 4 Subtotal:	4,229	0	4,229	0	0	0		

1/ Water transferred from Contra Costa Water District.

Table 19b. Governor Edmund G. Brown California Aqueduct

San Luis Field Division, Monthly Deliveries (Continued)

(In acre-feet)

October 2002

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries					
		Beginning and Ending				USBR	Transfer 1/	DWR Recreation	USBR Recreation		
	No.	Structure	Mile								
5	16		110.52	(Reverse flow, Kings River)	0	3,457	3,658	1			
			Thru	Westlands Water District	7,115						
			122.05	Department of Fish and Game	1						
		Check No. 16	122.07								
	17		124.18	Westlands Water District	2,883	2,883					
			Thru								
			132.74								
	Check No. 17	132.95									
	18		133.81	Westlands Water District	6,656	6,656					
			Thru								
			142.61								
		Pleasant Valley Pumping Plant	143.16	Westlands Water District	6,834	6,834					
			143.16	City of Coalinga	748						
		Check No. 18	143.23								
				Westlands WD Reach 5 Subtotal:	23,488	19,830	3,658	0	0		
6	19		145.26	Westlands Water District	8,035	8,035					
			Thru								
			151.19								
				Garrett Wheeladartor Frye Energy Company	1	1					
		Check No. 19	155.64								
				Westlands WD Reach 6 Subtotal:	8,035	8,035	0	0	0		
			156.34	City of Huron	106	106					
7	20		156.40	Westlands Water District	2,723	2,723					
			Thru								
			163.69								
		Check No. 20	164.69	City of Avenal	270	270					
	21		164.79	Westlands Water District	1,561	1,561					
			167.04								
			Thru								
			171.67		191,386						
	Check No. 21	172.40		Reach 7 Total:	4,660	4,660	0	0	0		
				Westlands WD Total:	40,036	32,149	7,887	0	0		
				City of Coalinga Total:	748	748	0	0	0		
				City of Huron Total:	106	106	0	0	0		
				GWF Energy	1	1	0	0	0		
				City of Avenal Total:	270	270	0	0	0		
				Phase I Water Total:	0	0	0	0	0		
				Total San Luis Field Division Deliveries:	63,414	55,409	7,887	65	53		

1/ Water transferred from Contra Costa Water District.

Table 20. Consolidated State-Federal San Luis Canal 1/

Daily Operations
October 2002

United States
Department of the Interior
Bureau of Reclamation
Central Valley Project

State of California
The Resources Agency
Department of Water Resources
State Water Project

Date	Storage In Canal (ac-ft)	Storage Change (ac-ft)	Inflow (cfs)		Outflow (cfs)				Computed Losses (-) Gains (+) (cfs)
			Non- Project 2/	Dos Amigos Pumping Plant	Pools 14 & 15 3/	Pool 15	Pools 15 thru 21 4/	Flow Past Check 21	
Sep 30	28,675								
1	28,633	-42	0	4,491	52	15	671	4,025	251
2	28,837	204	0	4,367	50	14	669	3,964	433
3	28,737	-100	0	4,179	51	13	670	3,760	265
4	29,307	570	0	4,164	49	12	671	3,252	108
5	28,922	-385	0	4,983	52	14	670	4,491	50
6	28,528	-394	0	5,143	50	13	671	4,694	86
7	28,895	367	0	4,372	49	12	669	3,568	111
8	28,772	-123	0	3,815	52	14	670	3,280	139
9	28,856	84	0	3,761	52	15	670	3,105	123
10	28,411	-445	0	3,354	51	13	668	2,938	91
11	28,808	397	0	3,996	49	14	670	3,128	65
12	28,516	-292	0	3,976	50	12	668	3,683	290
13	29,220	704	0	4,445	51	13	669	3,540	183
14	29,554	334	0	3,502	50	14	671	2,737	138
15	28,548	-1,006	0	2,935	52	15	670	2,849	144
16	28,891	343	0	3,540	51	14	668	2,732	98
17	28,344	-547	0	3,185	49	13	671	2,747	19
18	28,282	-62	0	3,060	50	12	668	2,379	17
19	28,819	537	0	3,457	51	14	670	2,527	76
20	29,060	241	0	4,040	49	15	668	3,422	236
21	28,893	-167	0	3,171	51	13	671	2,803	282
22	28,970	77	0	3,207	50	14	670	2,602	168
23	28,921	-49	0	3,554	51	13	669	3,049	203
24	28,548	-373	0	3,285	49	12	671	2,925	184
25	28,633	85	0	3,180	51	12	670	2,463	59
26	29,061	428	0	3,375	51	14	669	2,721	296
5/ 27	29,492	431	0	4,034	49	13	668	3,521	434
28	29,387	-105	0	2,615	50	15	670	2,231	298
29	29,058	-329	0	2,953	49	14	669	2,663	276
30	28,633	-425	0	2,501	50	12	668	2,380	395
31	28,283	-350	0	2,456	51	12	667	2,164	263
Total		-392	0	113,096	1,562	415	20,754	96,342	5,781
Mean cfs		---	0	3,648	50	13	669	3,108	186
Acre-feet		-392	0	224,656	3,099	824	41,166	191,386	11,427

1/ San Luis Canal includes Pools 14 through 21 of the California Aqueduct.

2/ Pump In of Non-Project Water (0 AF @ Lat.7L) and Flood Water (0 AF) is included in the gain or loss.

3/ Includes 89 AF AG & 1 AF M&I to Pacheco W.D. and 146 AF to the City of Dos Palos.

4/ Includes 106 AF to the City of Huron, 270 AF to the City of Avenal, 748 AF to the City of Coalinga,

1 AF of GWF Energy @ WWD Lateral 30L, 4 AF to Broadview WD, and 1 AF F&G @ WWD Lateral 4L.

5/ 25 hr.; The factor for converting CFS/AF is 2.0661 on 10/27/02.

Table 21. San Joaquin Field Division Plant Data

(in acre-feet)

October 2002

Date	Coastal Aqueduct					California Aqueduct			
	Las Perillas Pumping Plant	Badger Hill Pumping Plant	Devil's Den Pumping Plant	Bluestone Pumping Plant	Polonio Pass Pumping Plant	Buena Vista Pumping Plant	Teerink Pumping Plant	Chrisman Pumping Plant	Edmonston Pumping Plant
1	271	271	91	85	91	5,346	5,244	5,017	4,974
2	298	298	99	93	99	5,226	5,284	5,050	4,904
3	327	327	122	117	118	5,016	5,027	4,823	4,759
4	291	291	113	107	112	4,287	4,284	4,066	3,905
5	231	231	126	121	121	6,296	6,555	6,149	6,333
6	173	173	144	135	142	7,353	7,492	7,330	7,225
7	144	144	92	92	92	4,569	4,649	4,493	4,389
8	208	208	131	124	127	4,414	4,405	4,167	4,115
9	284	284	115	107	108	4,414	4,158	4,017	3,970
10	326	326	162	151	161	3,731	3,906	3,683	3,569
11	317	317	109	101	105	4,046	4,173	3,932	3,841
12	374	374	108	104	106	4,556	4,470	4,256	4,233
13	388	388	169	157	163	5,159	5,399	5,311	5,347
14	283	283	85	81	85	3,514	3,472	3,304	3,115
15	375	375	127	121	120	3,183	3,257	3,371	3,226
16	392	392	97	94	98	3,312	3,286	3,080	3,089
17	349	349	133	127	125	3,417	3,385	3,143	2,817
18	265	265	80	73	80	3,409	2,751	2,564	2,594
19	332	332	131	122	131	3,880	3,923	3,707	3,736
20	209	209	83	76	84	4,834	4,933	4,772	4,673
21	184	184	84	79	85	3,677	3,822	3,619	3,551
22	165	165	83	76	83	3,963	3,860	3,695	3,712
23	224	224	96	89	96	3,805	3,960	3,732	3,618
24	219	219	87	82	85	3,782	3,712	3,571	3,508
25	190	190	88	81	86	3,672	3,799	3,623	3,588
26	195	195	93	84	95	4,075	4,382	4,278	4,246
27	121	121	66	62	68	5,507	5,371	5,084	5,076
28	96	96	32	28	32	3,683	3,932	3,725	3,755
29	44	44	0	0	0	3,784	3,773	3,648	3,674
30	0	0	0	0	0	3,262	3,433	3,311	3,250
31	0	0	1	0	0	3,156	3,097	2,885	2,954
Total	7,275	7,275	2,947	2,769	2,898	132,328	133,194	127,406	125,746

Table 22a. Governor Edmund G. Brown California Aqueduct
San Joaquin Field Division, Monthly Deliveries

October 2002

(In acre-feet)

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Entitlement	USBR	Transfer	Purchase Pool A	Dry Year Purchase		
	No.	Structure	Mile									
7	21	Check No. 21	172.40		191,386							
8C	22		172.66	Empire West Side Irrig. Dist. TL - A	0	1,720	191	7	1/ 745			
				County of Kings TL - A	0							
				TLBWS D TL-A	1,720							
			175.18	DRWD - 1	191							
			177.54	DRWD - 1B	7							
			180.64	TLBWS D TL-C	0							
			180.65	DRWD - 1A	108							
			182.99	DRWD - 2	1,760							
			183.00	Tulare Lake Basin WSD TL - B	38							
			184.00	Dudley Ridge Water Dist. Paramount	3							
31A			184.63	Coastal Branch	7,275							
8D			184.78	Dudley Ridge Water Dist. DRWD - 3	985							
				Dudley Ridge Reach 8D Total:	3,054							
				Tulare Lake Basin WSD Total:	1,758							
		Check No. 22	184.82									
9	23		189.69	Kern County Water Agency Lost Hills Water Dist. - 1	1,689	1,689	595	111	293			
			191.18	Kern County Water Agency Lost Hills Water Dist. - 2	595							
			194.22	Kern County Water Agency Lost Hills Water Dist. - 3	111							
			196.40	Kern County Water Agency Berrenda Mesa - 2	0							
			196.75	Kern County Water Agency Lost Hills Water Dist. - 4	293							
				K.C.W.A. Reach 9 Subtotal:	2,688							
			Check No. 23	197.05								
10A	24		201.24	Kern County Water Agency Lost Hills Water Dist. - 7	183	183	118	8	882			
			202.05	Kern County Water Agency Lost Hills Water Dist. - 5	118							
			204.69	Kern County Water Agency Lost Hills Water Dist. - 6	0							
			205.26	Kern County Water Agency Lost Hills Water Dist. - 8	8							
			Check No. 24	207.94								
10A	25		209.71	Kern County Water Agency Belridge Water Storage Dist. - 1A	882	882	1,613	3,550	2/ 905 2/ 11,914			
			209.78	Kern National Wildlife Refuge USBR BV-1B	1,613							
				Kern County Water Agency Buena Vista WSD 1B	3,550							
			209.80	KCWA Semitropic WSD	905							
				KCWA Semitropic WSD Penstocks	11,914							
				USBR Total:	1,613							
				K.C.W.A. Reach 10A Subtotal:	17,560	4,741	0	12,819	0	0		

1/ Water transferred from Contra Costa Water District.

2/ Water transferred from Castaic WA for storage in Semitropic WA.

Table 22b. Governor Edmund G. Brown California Aqueduct
San Joaquin Field Division, Monthly Deliveries (Continued)

October 2002

(In acre-feet)

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Entitlement	Federal Wheeling 2/	Transfer 3/	Purchase Pool B	MWD Ent.		
	No.	Structure	Mile									
11B	25		210.75	Kern County Water Agency Belridge - 2	0	2	3,849	137	0	0		
			214.11	Kern County Water Agency Belridge - 3	2							
			216.62	Kern County Water Agency Belridge - 4	0							
			217.13	Kern County Water Agency Belridge - 5	3,849							
				Kern County Water Agency Belridge - 5D	137							
		Check No. 25	217.79									
				K.C.W.A. Reach 11B Subtotal:	3,988							
12D	26		219.58	Kern County Water Agency Belridge - 6	0	123	192	529	0	0		
				Kern County Water Agency West Kern - 3	123							
		Check No. 26	224.92									
	27		230.37	Kern County Water Agency Buena Vista - 6	0							
12E	28		235.75	Kern County Water Agency Buena Vista - 2	0	6,909	192	529	0	0		
				Kern County WA CVC	7,438							
				Hills Valley	192							
				Tulare Co.	304							
			238.04	Lower Tule River	1,790							
				Tri Valley	67							
				Pixley ID	1,790							
				Hacienda								
				DWR Wells	0							
	Check No. 28	238.11		1/ Arvin Edison Total:	4,143							
				Reach 12E Subtotal:	11,581	0	4,143	0	0	0		
			238.19	Kern Water Bank Inflow	0	6,909	4,143	529	0	0		
13B	29		241.02	Kern River Intertie (inflow)	0	198	0	0	0	0		
			242.85	KCWA Buena Vista WSD - 7	0							
			243.09	KCWA Buena Vista WSD - 5	0							
			Check No. 29	Kern County Water Agency Buena Vista - 3	0							
			244.54	Buena Vista WSD	0							
			249.85	Kern County Water Agency Buena Vista - 4	198							
			250.99		132,328							
				K.C.W.A. Reach 13B Subtotal:	198	198	0	0	0	0		
14A	31		254.47	Kern County Water Agency West Kern - 2	0							
			256.11	Kern County Water Agency Wheeler Ridge-Maricopa - 2	0							

1/ Arvin Edison Contractors include Rag Gulch WD, Kern-Tulare WD, Fresno County, Hills Valley ID, Tri Valley WD, Tulare County, Lower Tule River ID, and Pixley ID.

2/ Wheeling Federal Water for Friant Water Users Authority.

3/ Water transferred from Kern Tulare Water Agency (265 AF) and Rag Gulch Water Agency (264 AF) to KCWA.

Table 22c. Governor Edmund G. Brown California Aqueduct
San Joaquin Field Division, Monthly Deliveries (Continued)

(In acre-feet)

October 2002

Reach No.	Operating Pool			Turnout	Total Diver-sions	Deliveries										
	Beginning and Ending		Mile			Entitle-ment	Recovery of Pump In	MWD Ent. Exchange	Exchange	MWD Ent.						
	No.	Structure														
14A	31	Check No. 31	256.14			53	0	0	0	0						
	32		258.61		Kern County Water Agency Wheeler Ridge-Maricopa - 3											
			260.44		Kern County Water Agency Wheeler Ridge-Maricopa - 4		343									
		Check No. 32	261.72													
		KCWA Reach 14A Subtotal:			396											
14B	33		264.42		Kern County Water Agency Wheeler Ridge-Maricopa - 5	1,069	0	0	0	0						
			266.91		Kern County Water Agency Wheeler Ridge-Maricopa - 6											
			267.36													
	34		270.24		Kern County Water Agency Wheeler Ridge-Maricopa - 7	979	0	0	0	0						
			271.27													
	Reach 14B Total:			2,421		2,421										
14C	35		272.39		Kern County Water Agency Wheeler Ridge-Maricopa - 8	619	0	0	0	0						
			276.09		Kern County Water Agency Wheeler Ridge-Maricopa - 9											
			Reach 14C Total:													
15A	Teerink Pumping Plant		278.13			133,194	0	0	0	0						
			Reach 15-A Total:													
	36		279.02		Kern County Water Agency Wheeler Ridge-Maricopa - 9A	566	0	0	0	0						
			280.06		Kern County Water Agency Wheeler Ridge-Maricopa - 10											
			Reach 15-A Total:													
			280.36			127,406	0	0	0	0						
16A	Chrisman Pumping Plant		282.06		Kern County Water Agency Wheeler Ridge-Maricopa - 11											
			283.95													
			Reach 16A Total:													
	38		285.01		Kern County Water Agency Wheeler Ridge-Maricopa - 12	13	0	0	0	0						
			286.39		Kern County Water Agency Wheeler Ridge-Maricopa - 13A											
			287.06		Kern County Water Agency Wheeler Ridge-Maricopa - 13											
			287.09													
	39		287.62		Kern County Water Agency Wheeler Ridge-Maricopa - 13B	80	0	0	0	0						
			290.21													
	40		291.26		Kern County Water Agency Wheeler Ridge-Maricopa - 14	317	0	0	0	0						
			293.07		Kern County Water Agency Wheeler Ridge-Maricopa - 15											
			Kern County Water Agency Tehachapi Cummings CWD													
			K.C.W.A. Reach 16A Subtotal:													
			293.45													
17E	Edmonston Pumping Plant					125,746										

Table 23. Governor Edmund G. Brown California Aqueduct
San Joaquin Field Division, Monthly Deliveries (Coastal Branch)

(In acre-feet)

October 2002

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Entitlement	Recovery of Pump In	Transfer 1/	Exchange	MWD Ent.		
	No.	Structure	Mile									
31A	C-1	Coastal Branch Control	0.02		7,275	471						
		Las Perillas Pumping Plant	1.16		7,275							
	C-2		3.79	Green Valley Water District	0							
		Badger Hill Pumping Plant	4.27		7,275							
	C-3	Coastal Check No. 3	7.21									
	C-4		9.34	Castaic Lake WA (Devil's Den WD #1)	0							
		Coastal Check No. 4	9.34									
	C-5	Coastal Check No. 5	12.20									
	C-6		13.30	Kern County Water Agency Berrenda Mesa - 3	471							
			14.83	Kern County Water Agency Berrenda Mesa - 1	4,176							
				Kern County Water Agency Berrenda Mesa - PO	0							
		Devil's Den Pumping Plant	14.86		2,947							
				K.C.W.A. Reach 31A Subtotal:	4,647	4,647	0	0	0	0		
				K.C.W.A. Total:	44,421	31,073	0	13,348	0	0		
33A	C-7	Bluestone Pumping Plant	19.05		2,769	2,452						
	C-8	Polonio Pass Pumping Plant	26.54		2,898							
	C-9	Tank Site 1	27.81	(CCWA) Polonio Pass Treatment Plant								
	C-10	Shandon T.O.	38.23	Santa Barbara County (CCWA)	2,452							
		Tank Site 2	58.63	Central Coast:	0							
34	C-11	Chorro Valley T.O.	69.31	San Luis Obispo County (CCWA)	367	367						
		Energy Dissipater	78.12									
	Lopez T.O.		85.86	SLOCFC & WCD	0							
35	C-12			CCWA Total:	2,819	2,819	0	0	0	0		
		Guadalupe T.O.	102.70	SBCFC & WCD	0							
		Santa Maria T.O.	107.43	SBCFC & WCD	0							
		So. Cal. Water T.O.	109.20	SBCFC & WCD	0		0	0	0	0		
38				SBCFC & WCD Total:	0							
	Tank Site 5	115.42										

1/ Water transferred from Kern Tulare Water Agency (265 AF) and Rag Gulch Water Agency (264 AF) to KCWA and 12,819 AF transferred by Castaic WA for storage in Semitropic WA.

Table 24. Southern Field Division Plant Data

(in acre-feet)

October 2002

Date	West Branch					East Branch								Devil Canyon Powerplant Generation
	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant		Alamo Powerplant			Pearblossom Pumping Plant	Mojave Siphon Powerplant				
		Generation	Leakage	Generation	Pumpback	Generation	Bypass Through Plant	Cottonwood Chute		Generation	Leakage	Bypass Flume		
1	1,655	1,917	0	6,095	2,496	3,097	0	260	2,849	2,683	0	0	2,835	
2	1,445	2,072	0	6,645	2,699	3,263	0	175	3,015	3,098	0	0	2,699	
3	1,462	1,980	0	4,535	1,953	3,059	0	151	3,018	3,419	0	0	2,659	
4	1,437	1,834	0	1,805	702	2,398	0	60	2,279	2,213	0	0	2,726	
5	3,521	1,017	0	374	0	2,697	0	0	2,149	2,027	0	0	2,567	
6	3,198	2,945	0	490	1,313	3,610	0	334	3,526	3,449	0	0	2,838	
7	1,601	1,784	0	4,167	772	2,649	0	100	2,627	3,043	0	0	2,879	
8	1,281	1,513	0	3,976	677	2,557	0	239	2,614	2,735	0	0	2,519	
9	1,118	1,453	0	4,081	1,502	2,528	0	300	2,326	2,453	0	0	2,584	
10	1,171	1,539	0	4,051	1,571	2,309	0	55	2,305	2,117	0	0	2,623	
11	1,113	1,618	0	4,752	1,641	2,541	0	140	2,298	2,401	0	0	2,772	
12	1,272	1,441	0	368	1,852	2,751	0	223	2,803	2,929	0	0	2,517	
13	1,756	1,520	0	407	2,502	3,471	0	78	3,186	2,730	0	0	2,585	
14	735	75	0	1,166	1,243	2,274	0	40	2,067	2,368	0	0	2,735	
15	341	0	0	1,290	1,228	2,025	0	441	2,317	2,353	0	0	2,435	
16	361	0	0	3,767	3,565	2,345	0	260	2,379	2,393	0	0	2,547	
17	360	0	0	3,266	1,447	2,424	0	252	2,388	2,551	0	0	2,446	
18	324	0	0	5,369	3,578	1,989	0	270	2,109	2,042	0	0	2,424	
19	695	1,185	0	905	1,891	3,018	0	0	2,780	2,556	0	0	2,510	
20	1,758	1,488	0	3,171	4,590	2,947	0	0	2,577	2,553	0	0	2,254	
21	901	1,566	0	3,402	1,747	2,616	0	0	2,626	2,446	0	0	2,285	
22	1,422	928	0	3,387	1,003	2,045	0	171	2,220	2,357	0	0	2,278	
23	1,313	1,565	0	3,332	1,130	2,320	0	0	2,192	1,929	0	0	2,339	
24	1,314	1,570	0	3,098	807	2,075	0	92	2,025	2,136	0	0	2,382	
25	1,203	1,561	0	3,053	672	2,167	0	154	2,096	2,134	0	0	2,297	
26	1,752	1,467	0	298	698	2,298	0	211	2,388	2,444	0	0	2,084	
27	2,432	1,593	0	1,207	4,599	2,529	0	0	2,544	1,984	0	0	2,346	
28	1,103	1,441	0	3,559	1,636	1,069	0	1,721	2,145	2,482	0	0	2,433	
29	1,120	1,409	0	2,821	529	0	0	2,525	2,152	2,209	0	0	2,211	
30	1,122	1,423	0	3,121	380	0	0	2,127	1,947	1,875	0	0	2,148	
31	1,071	1,478	0	2,940	0	0	0	1,847	1,797	1,791	0	0	2,216	
Total	41,357	41,382	0	90,898	50,423	71,071	0	12,226	75,744	75,900	0	0	77,173	

Table 25. Pyramid Lake
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

October 2002

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Deliveries 1/	To Piru Creek	
Sep 30	2574.09	164,902								
1	2572.60	163,023	-1,879	2,496	1,917	14	6,095	52	17	-142
2	2570.94	160,946	-2,077	2,699	2,072	14	6,645	52	16	-149
3	2570.38	160,250	-696	1,953	1,980	14	4,535	53	16	-39
4	2570.90	160,897	647	702	1,834	13	1,805	54	16	-27
5	2571.34	161,445	548	0	1,017	13	374	55	14	-39
6	2574.22	165,067	3,622	1,313	2,945	13	490	56	13	-90
7	2572.84	163,325	-1,742	772	1,784	13	4,167	57	13	-74
8	2571.38	161,495	-1,830	677	1,513	13	3,976	56	13	12
9	2570.38	160,250	-1,245	1,502	1,453	13	4,081	55	12	-65
10	2569.52	159,184	-1,066	1,571	1,539	13	4,051	54	11	-73
11	2568.10	157,433	-1,751	1,641	1,618	12	4,752	53	10	-207
12	2570.39	160,262	2,829	1,852	1,441	12	368	52	10	-46
13	2573.21	163,791	3,529	2,502	1,520	12	407	51	10	-37
14	2573.27	163,866	75	1,243	75	12	1,166	50	10	-29
15	2573.17	163,740	-126	1,228	0	12	1,290	47	9	-20
16	2572.94	163,451	-289	3,565	0	12	3,767	47	9	-43
17	2571.45	161,583	-1,868	1,447	0	12	3,266	43	9	-9
18	2569.93	159,691	-1,892	3,578	0	12	5,369	42	9	-62
19	2571.62	161,795	2,104	1,891	1,185	12	905	39	9	-31
20	2573.86	164,611	2,816	4,590	1,488	13	3,171	35	11	-58
21	2573.71	164,422	-189	1,747	1,566	13	3,402	33	11	-69
22	2572.48	162,873	-1,549	1,003	928	13	3,387	32	10	-64
23	2571.95	162,208	-665	1,130	1,565	13	3,332	29	11	-1
24	2571.34	161,445	-763	807	1,570	14	3,098	27	11	-18
25	2570.61	160,536	-909	672	1,561	14	3,053	25	11	-67
26	2572.08	162,371	1,835	698	1,467	15	298	23	11	-13
27	2575.94	167,255	4,884	4,599	1,593	15	1,207	21	11	-84
28	2575.46	166,643	-612	1,636	1,441	14	3,559	19	11	-114
29	2574.70	165,676	-967	529	1,409	14	2,821	18	10	-70
30	2573.66	164,359	-1,317	380	1,423	14	3,121	18	9	14
31	2572.46	162,847	-1,512	0	1,478	15	2,940	17	10	-38
Total				-2,055	50,423	41,382	408	90,898	1,265	353
										-1,752

1/ Includes 1 AF recreation and 1,264 AF entitlement to United Water Conservation District.

Table 26. Elderberry Forebay

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

October 2002

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)	
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake			
							Natural	Project		
Sep 30	1516.64	21,831								
1	1517.25	22,084	253	6,095	0	2,496	0	3,346	0	
2	1526.41	26,044	3,960	6,645	0	2,699	0	0	14	
3	1524.20	25,062	-982	4,535	0	1,953	0	3,566	2	
4	1519.21	22,905	-2,157	1,805	0	702	0	3,258	-2	
5	1512.51	20,163	-2,742	374	0	0	0	3,117	1	
6	1510.39	19,335	-828	490	0	1,313	0	0	-5	
7	1518.67	22,677	3,342	4,167	0	772	0	0	-53	
8	1519.18	22,892	215	3,976	0	677	0	3,084	0	
9	1525.00	25,416	2,524	4,081	0	1,502	0	0	-55	
10	1523.53	24,767	-649	4,051	0	1,571	0	3,129	0	
11	1523.58	24,789	22	4,752	0	1,641	0	3,089	0	
12	1520.19	23,322	-1,467	368	0	1,852	0	0	17	
13	1515.23	21,254	-2,068	407	0	2,502	0	0	27	
14	1515.06	21,185	-69	1,166	0	1,243	0	0	8	
15	1515.22	21,250	65	1,290	0	1,228	0	0	3	
16	1515.61	21,409	159	3,767	0	3,565	0	0	-43	
17	1519.98	23,232	1,823	3,266	0	1,447	0	0	4	
18	1523.99	24,969	1,737	5,369	0	3,578	0	0	-54	
19	1521.70	23,970	-999	905	0	1,891	0	0	-13	
20	1513.42	20,524	-3,446	3,171	0	4,590	0	2,026	-1	
21	1517.43	22,158	1,634	3,402	0	1,747	0	0	-21	
22	1515.67	21,433	-725	3,387	0	1,003	0	3,110	1	
23	1515.06	21,185	-248	3,332	0	1,130	0	2,450	0	
24	1520.39	23,407	2,222	3,098	0	807	0	0	-69	
25	1519.74	23,130	-277	3,053	0	672	0	2,659	1	
26	1512.22	20,049	-3,081	298	0	698	0	2,682	1	
27	1503.41	16,733	-3,316	1,207	0	4,599	0	0	76	
28	1508.51	18,615	1,882	3,559	0	1,636	0	0	-41	
29	1507.26	18,145	-470	2,821	0	529	0	2,762	0	
30	1514.21	20,841	2,696	3,121	0	380	0	0	-45	
31	1514.86	21,103	262	2,940	0	0	0	2,276	-402	
Total				-728	90,898	0	50,423	0	40,554	
									-649	

Table 27. Castaic Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 323,699 ac-ft

October 2002

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow		Computed Losses (-) And Gains (+)	
				From Elderberry Forebay		Natural	Deliveries		
				Natural	Project				
Sep 30	1508.62	309,623							
1	1509.25	310,996	1,373	0	3,346	0	1,823	0	
2	1508.29	308,905	-2,091	0	0	0	2,043	0	
3	1508.95	310,342	1,437	0	3,566	0	2,311	0	
4	1509.18	310,844	502	0	3,258	0	2,507	0	
5	1509.48	311,499	655	0	3,117	0	2,539	0	
6	1508.31	308,948	-2,551	0	0	0	2,521	0	
7	1507.13	306,388	-2,560	0	0	0	2,553	0	
8	1507.28	306,713	325	0	3,084	0	2,735	0	
9	1506.05	304,056	-2,657	0	0	0	2,707	0	
10	1506.23	304,444	388	0	3,129	0	2,611	0	
11	1506.57	305,178	734	0	3,089	0	2,511	0	
12	1505.43	302,722	-2,456	0	0	0	2,458	0	
13	1504.38	300,471	-2,251	0	0	0	2,311	0	
14	1503.33	298,230	-2,241	0	0	0	2,241	0	
15	1502.22	295,871	-2,359	0	0	0	2,382	0	
16	1501.11	293,523	-2,348	0	0	0	2,356	0	
17	1500.00	291,186	-2,337	0	0	0	2,379	0	
18	1498.83	288,735	-2,451	0	0	0	2,438	0	
19	1497.69	286,359	-2,376	0	0	0	2,392	0	
20	1497.57	286,109	-250	0	2,026	0	2,359	0	
21	1496.43	283,745	-2,364	0	0	0	2,455	0	
22	1496.75	284,408	663	0	3,110	0	2,434	0	
23	1496.78	284,470	62	0	2,450	0	2,341	0	
24	1495.67	282,176	-2,294	0	0	0	2,314	0	
25	1495.81	282,465	289	0	2,659	0	2,311	0	
26	1495.99	282,836	371	0	2,682	0	2,321	0	
27	1494.91	280,612	-2,224	0	0	0	2,175	0	
28	1493.80	278,336	-2,276	0	0	0	2,342	0	
29	1493.99	278,725	389	0	2,762	0	2,499	0	
30	1492.78	276,255	-2,470	0	0	0	2,460	0	
31	1493.15	277,009	754	0	2,276	0	2,362	0	
Total			-32,614	0	40,554	0	74,191	0	
								1,023	

Table 28. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (West Branch)

(In acre-feet)

Reach No.	Operating Pool			Turnout	Total Diversions	October 2002						
	Beginning and Ending		Mile			Entitlement	Deliveries					
	No.	Structure					Rec.	Local	Purchase Pool B	Flexible Payback		
29A	42	Oso Pumping Plant	1.49		41,357							
29F	W2	Quail Lake	5.02	Antelope Valley-East Kern Water Agency	Re-moved	1,264	1					
		Quail Lake Embankment	7.82	Antelope Valley-East Kern Water Agency	Stub							
		Warne Power Plant	14.07		41,382							
29H	W3	Pyramid Lake		Calif. State Park Pyramid Recreation	1	1,264	1					
			14.10	United Water Conservation Dist.	1,264							
		Pyramid Dam	17.10	Piru Creek Fish Enhancement	0							
		Castaic Power Plant	25.82	(50,423 AF pumpback)	90,898							
29J	W4	Elderberry Forebay				14,142	25					
		Forebay Dam	28.12									
30 1/	W5	Castaic Lake		Calif. State Park Castaic Lake Recreation	25	14,142 55,994 1,688 2,188 154	25			16,468		
		Castaic Dam	31.47									
		Castaic Lake Outlet	31.55	MWD - 78"	30,610							
				MWD - 132"	55,994							
				Castaic Lake WA - T1	1,688							
				Castaic Lake WA	2,188							
				United Water Conservation Dist.	0							
				MWD - Ventura County FCD	154							
				LA Co. Parks & Recreation	0							
				Releases to Lagoon	0							
				Reach 30 Subtotal:	74,191							
	W6	Castaic Lagoon		Recreation to Lagoon	0		25	0	0	16,468		
		Castaic Lagoon Outlet	31.87									

1/ Reach 30 actually terminates at mile 31.50. It is shown here as including the outlet works at mile 31.55.

All deliveries from the outlet works and from the Lagoon are billed to Reach 30.

Table 29. Silverwood Lake

Daily Operation

(in acre-feet except as noted)

Capacity: 74,970 ac-ft

October 2002

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)	Las Flores Ranch Exchange 1/	
				Mojave Siphon Power-plant	Mojave Bypass Flume	Natural Stream Flow	Delivered to CLAWA	Rec.	San Bernardino Tunnel	Del. To Mojave W.A.	Natural To Mojave River		
Sep 30	3351.47	71,568											
1	3351.29	71,397	-171	2,683	0	0	8	0	2,835	0	1	-10	0
2	3351.62	71,711	314	3,098	0	0	6	0	2,699	0	0	-79	0
3	3352.45	72,503	792	3,419	0	0	6	1	2,659	0	1	40	0
4	3351.95	72,025	-478	2,213	0	0	5	0	2,726	0	0	40	0
5	3351.32	71,425	-600	2,027	0	0	5	0	2,567	0	1	-54	0
6	3351.94	72,016	591	3,449	0	0	4	1	2,838	0	0	-15	0
7	3352.20	72,264	248	3,043	0	0	5	0	2,879	0	0	89	0
8	3352.37	72,427	163	2,735	0	0	6	0	2,519	0	0	-47	0
9	3352.25	72,312	-115	2,453	0	0	8	0	2,584	0	1	25	0
10	3351.81	71,892	-420	2,117	0	0	4	1	2,623	0	0	91	0
11	3351.37	71,473	-419	2,401	0	0	7	0	2,772	0	0	-41	0
12	3351.84	71,920	447	2,929	0	0	8	0	2,517	0	1	44	0
13	3351.94	72,016	96	2,730	0	0	7	0	2,585	0	0	-42	0
14	3351.61	71,701	-315	2,368	0	0	6	1	2,735	0	0	59	0
15	3351.51	71,606	-95	2,353	0	0	8	0	2,435	0	1	-4	0
16	3351.37	71,473	-133	2,393	0	0	8	0	2,547	0	0	29	0
17	3351.46	71,558	85	2,551	0	0	9	0	2,446	0	0	-11	0
18	3351.06	71,178	-380	2,042	0	0	5	1	2,424	0	1	9	0
19	3351.04	71,159	-19	2,556	0	0	7	0	2,510	0	0	-58	0
20	3351.36	71,463	304	2,553	0	0	8	0	2,254	0	0	13	0
21	3351.56	71,653	190	2,446	0	0	7	1	2,285	0	1	38	0
22	3351.61	71,701	48	2,357	0	0	7	0	2,278	0	0	-24	0
23	3351.13	71,245	-456	1,929	0	0	8	1	2,339	0	0	-37	0
24	3350.96	71,083	-162	2,136	0	0	7	0	2,382	0	1	92	0
25	3350.77	70,903	-180	2,134	0	0	8	0	2,297	0	0	-9	0
26	3351.17	71,283	380	2,444	0	0	7	0	2,084	0	0	27	0
27	3350.76	70,894	-389	1,984	0	0	6	1	2,346	0	1	-19	0
28	3350.84	70,970	76	2,482	0	0	5	0	2,433	0	0	32	0
29	3350.86	70,989	19	2,209	0	0	6	0	2,211	0	0	27	0
30	3350.55	70,695	-294	1,875	0	0	6	1	2,148	0	1	-13	0
31	3350.32	70,478	-217	1,791	0	0	5	0	2,216	0	0	213	0
Total				-1,090	75,900	0	202	9	77,173	0	11	405	0

1/ Project water delivered from Mojave Siphon in exchange for like amount of Natural Streamflow.

Table 30. Lake Perris

Daily Operation
(in acre-feet except as noted)

Capacity: 131,452 ac-ft

October 2002

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow 1/	Outflow 2/	Computed Losses (-) Gains (+) 1/
Sep 30	1582.95	115,468				
1	1583.10	115,800	332		9	
2	1583.19	115,999	199		10	
3	1583.21	116,044	45		10	
4	1583.16	115,933	-111		10	
5	1583.20	116,021	88		9	
6	1583.17	115,955	-66		11	
7	1583.20	116,021	66		10	
8	1583.15	115,911	-110		9	
9	1583.16	115,933	22		11	
10	1583.13	115,866	-67		10	
11	1583.12	115,844	-22		11	
12	1583.19	115,999	155		10	
13	1583.13	115,866	-133		10	
14	1583.15	115,911	45		10	
15	1583.14	115,889	-22		74	
16	1583.15	115,911	22		62	
17	1583.10	115,800	-111		62	
18	1583.10	115,800	0		48	
19	1583.10	115,800	0		10	
20	1583.13	115,866	66		10	
21	1583.14	115,889	23		12	
22	1583.11	115,822	-67		10	
23	1583.11	115,822	0		11	
24	1583.17	115,955	133		11	
25	1583.26	116,154	199		12	
26	1583.35	116,354	200		11	
27	1583.39	116,443	89		12	
28	1583.46	116,598	155		11	
29	1583.59	116,887	289		11	
30	1583.72	117,176	289		12	
31	1583.79	117,331	155		11	
Total			1,863	3,987	530	-1,594

1/ Readings are not taken on a daily basis. End of month only.

2/ Includes deliveries to MWD from Reach 28J and recreation water to California State Park at lake Perris.

Table 31a. Governor Edmund G. Brown California Aqueduct

Southern Field Division, Monthly Deliveries (East Branch)

(In acre-feet)

October 2002

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Entitle-ment	Rec.	Transfer 1/	Purchase Pool A	Transfer Local Out		
	No.	Structure	Mile									
17E	40	Edmonston Pumping Plant	293.45		125,746							
	41		298.65		Kern County Water Agency Tej.-Cas		Stub					
17F		Check No. 41	303.41									
18A	42	Check No. 42	304.99									
19	43	Alamo Powerplant	305.73	(Does not include 12,226 AF flow down Cottonwood Chute)		71,071	1	524	105			
			308.05	Antelope Valley-East Kern WA		0						
		Check No. 43	309.70									
	44		311.84	LADWP Connection		0						
			313.50	AVEK 245th Street West		0						
	Check No. 44		314.81									
	45		314.93	AVEK 235th Street West		1						
			315.57	AVEK 225th Street West		0						
	Check No. 45		319.74									
	46		323.19	Antelope Valley-East Kern WA Fairmont		629						
		Check No. 46	323.84									
				Reach 19 Total:		630		525	0	105		
20A	47	Check No. 47	326.77				113	3,549	60			
	48		326.91	Antelope Valley-East Kern WA Willow Springs Siphon		113						
			329.65	Antelope Valley-East Kern WA 120th Street West		Removed						
		Check No. 48	330.82									
	49	Check No. 49	335.93									
20B	50		336.73	AVEK WA - Quartz Hill (Wheeled for Palmdale WD)		0	145	1,631				
			339.68	Antelope Valley-East Kern WA		3,549						
			339.68	Antelope Valley-East Kern WA		60						
	Check No. 50		341.51									
	51	Check No. 51	342.07									
21	52		342.80	Antelope Valley-East Kern WA 30th Street West		Not in Use	31	352				
		Check No. 52	343.74									
	53		346.98	PWD Palmdale		1,631						
			348.14	Antelope Valley-East Kern WA Acton Treatment Plant		145						
22A	Check No. 53		348.17				31	352				
	54	Check No. 54	350.25									
	55	Check No. 55	352.70									
	56	Check No. 56	354.76									
			354.97	Littlerock Creek I.D.		0						
	57	Check No. 57	356.93									
	58		357.60	Antelope Valley-East Kern WA		31						
			357.72	Antelope Valley-East Kern WA 96th Street East		0						
			359.82	Antelope Valley-East Kern WA East Side Treatment Plant		352						

1/ AVEK transferred this water to Mojave Water Agency.

Table 31b. Governor Edmund G. Brown California Aqueduct
 Southern Field Division, Monthly Deliveries (East Branch, Continued)

(In acre-feet)

October 2002

Reach No.	Operating Pool			Turnout	Total Diversions	Deliveries						
	Beginning and Ending					Entitlement	Recreation	Ex-change	Local	Flexible Payback		
	No.	Structure	Mile									
22B	58	Pearblossom Pumping Plant	360.61		75,744	10 228 192						
	59	Check No. 59	366.09									
	60		366.50	Antelope Valley-East Kern WA	0							
		Check No. 60	373.94									
	61	Check No. 61	379.00									
	62	Check No. 62	384.26									
	63	Check No. 63	389.20	Mojave Water Agency Mojave River	10							
	64	Check No. 64	394.60	Mojave Water Agency Temporary	228							
			395.10									
	65	Check No. 65	400.32									
23	67	Mojave Siphon Powerplant	401.10	Mojave Water Agency Morongo 24" and 42"	192	202 9						
				Mojave Water Agency Hesperia	0							
		Check No. 66	403.41									
		Mojave Siphon	405.48	Las Flores Ranch	0							
		Mojave Siphon Powerplant	405.65		75,900							
		Silverwood Lake	407.65	Crestline Lake Arrowhead Water Agency	202							
				Calif. State Park Silverwood Agency (Rec.)	9							
		San Bernardino Tunnel	411.46		77,173							
				San Gorgonio Pass Water Agency	0							
26A	68	Devil Canyon Afterbay Control Structures	412.88	MWD-SC Rialto	28,194	28,194 2,905 2,497 1,763 6,932 534						
				Desert Water Agency (MWD Wheeling Exchange)	2,905							
				San Gabriel Valley Water District	2,497							
				Coachella Valley WD (MWD Wheeling Exchange)	1,763							
				San Bernardino Valley MWD 24" and 72"	6,932							
				San Bernardino Valley MWD 48"	534							
				MWD (SBVMWD Exchange)	0							
28G	69	Santa Ana Valley Pipeline	425.46			7,013 23,794 288						
28H			433.06	MWD-SC Box Springs	7,013							
			440.05	MWD-SC Perris Bypass Pipeline	23,794							
28J			442.00	MWD-SC 18"	288							
	69	Lake Perris	443.44	MWD-SC 54"	69	69 138						
				MWD-SC 78"	138							
				Calif. State Park Lake Perris Recreation	35							
				MWD Total:	136,142		35					
						136,142	0	0	0	16,468		

Table 32. Water Quality At Selected SWP Locations

October 2002

Constituent	Units	Thermalito Afterbay At Outlet	North Bay Aqueduct Barker Slough Pumping Plant	Banks Pumping Plant	Delta Mendota Canal At McCabe Rd.	California Aqueduct				Devil Canyon Afterbay Near San Bernardino
						O'Neill Forebay Outlet (Check 13)	Kettleman City (Check 21)	Near Hwy 119 (Check 29)	Tehachapi Afterbay (Check 41)	
Alkalinity	mg/l as CaCO ₃	49	90	83	82	90	90	89	88	82
Antimony	mg/l	NR	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	NR	NR
Arsenic	mg/l	<0.001	0.001	0.003	0.002	0.003	0.003	0.003	0.003	0.003
Beryllium	mg/l	NR	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Boron	mg/l	<0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1
Bromide	mg/l	NR	0.03	0.43	0.37	0.32	0.34	0.38	0.47	0.38
Calcium	mg/l	9	15	18	19	22	22	21	23	19
Carbon - Dissolved Organic	mg/l as C	NR	3	2	2	3	3	3	3	2
Carbon - Total Organic	mg/l as C	NR	5	3	<0.5	4	4	4	3	3
Chloride	mg/l	1	15	134	120	99	110	124	113	118
Chromium	mg/l	<0.001	0.002	0.003	0.003	0.002	0.003	0.002	0.004	0.003
Copper	mg/l	<0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.003
Fluoride	mg/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Hardness	mg/l as CaCO ₃	39	83	111	109	117	121	118	105	105
Iron	mg/l	0.009	<0.005	0.006	0.007	<0.005	0.005	0.005	<0.005	<0.005
Lead	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium	mg/l	4	11	16	15	15	16	16	17	15
Manganese	mg/l	<0.005	0.005	0.022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Nitrate + Nitrite	mg/l as N	<0.01	0.24	0.30	NR	NR	0.45	NR	0.39	0.28
Phosphorus-Ortho	mg/l as P	<0.01	0.08	0.06	NR	NR	0.08	NR	0.07	0.07
Phosphorus-Total	mg/l	<0.01	0.14	0.09	NR	NR	0.09	NR	0.09	0.09
Selenium	mg/l	NR	<0.001	0.002	NR	NR	NR	0.001	NR	NR
Sodium	mg/l	4	18	79	74	66	71	79	79	73
Specific Conductance	µS/cm	99	245	652	618	585	603	675	636	601
Sulfate	mg/l	2	13	33	33	41	40	39	39	32
Total Dissolved Solids	mg/l	60	147	398	380	352.5	368	411.5	384	373
Turbidity	NTU	1	4	4	6	4	2	2	4	<1
Zinc	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005

mg/l milligrams per liter

µg/l micrograms per liter

µS/cm microSiemens per centimeter

NR - Not Reported

NTU - nephelometric turbidity units

Table 33. Water Quality At Selected Delta Stations

October 2002

Date	Tides (feet above mean sea level)		Flow In CFS		Electrical Conductivity in millSiemens/cm									Cl in mg/l	
			Net Delta Outflow Index		Rio Vista	Antioch	Chippis island	Emmaton		Jersey Point		Clifton Court	Cache Slough	Delta Mendota Canal	
	(Antioch) Daily Mean		Mean Daily	Monthly Average				md	md	md	14dm	md	14dm	md	
	Hi		Half		md	md	md	14dm	md	14dm	md	md	md	md	md
1	3.00	1.30	5,014	5,014	5,948	4.11	10.47	1.01	1.35	1.50	1.71	0.60	0.56	0.64	235
2	2.79	0.95	4,670	4,842	5,718	3.52	9.60	0.85	1.32	1.38	1.69	0.60	0.54	0.63	242
3	2.79	0.94	4,831	4,838	5,458	3.66	10.36	1.19	1.31	1.38	1.66	0.60	0.52	0.64	225
4	2.87	0.95	4,485	4,750	5,261	4.01	10.73	1.41	1.29	1.38	1.63	0.60	0.53	0.62	238
5	2.77	0.92	4,986	4,797	5,105	3.93	10.68	1.48	1.28	1.35	1.60	0.60	0.54	0.62	243
6	2.52	0.82	4,760	4,791	4,869	3.67	10.76	1.51	1.29	1.29	1.57	0.60	0.58	0.63	245
7	2.80	0.87	4,804	4,793	4,618	3.99	11.08	1.68	1.33	1.29	1.54	0.60	0.62	0.62	257
8	3.06	1.00	4,417	4,746	4,291	4.36	11.62	1.95	1.38	1.36	1.52	0.60	0.63	0.61	250
9	3.41	1.22	3,736	4,634	4,078	4.81	12.72	2.36	1.46	1.46	1.50	0.60	0.60	0.60	243
10	3.46	1.44	3,576	4,528	4,015	5.25	13.78	2.94	1.55	1.59	1.49	0.60	0.60	0.59	247
11	2.99	1.21	3,541	4,438	4,721	4.40	12.09	1.96	1.58	1.41	1.46	0.60	0.65	0.58	248
12	2.75	1.05	4,452	4,439	4,406	4.42	11.24	1.76	1.64	1.35	1.43	0.60	0.64	0.58	252
13	2.60	0.99	4,117	4,415	4,239	4.23	10.87	1.88	1.65	1.29	1.40	0.60	0.63	0.57	258
14	2.60	1.01	3,975	4,383	4,141	4.19	11.06	2.09	1.72	1.24	1.38	0.60	0.62	0.57	252
15	2.65	1.16	3,804	4,345	4,028	4.65	12.52	2.48	1.82	1.33	1.36	0.60	0.59	0.57	243
16	2.65	1.18	3,747	4,307	5,135	4.95	12.63	2.65	1.95	1.39	1.37	0.60	0.58	0.57	248
17	2.57	1.09	3,977	4,288	7,016	4.95	11.75	2.45	2.04	1.40	1.37	0.60	0.60	0.57	250
18	2.43	0.91	3,806	4,261	7,085	4.65	11.15	1.89	2.08	1.36	1.36	0.60	0.63	0.56	242
19	2.21	0.76	4,146	4,255	5,282	4.50	10.41	1.59	2.09	1.30	1.36	0.60	0.66	0.56	250
20	2.46	0.85	4,256	4,255	4,380	4.53	10.61	1.72	2.10	1.36	1.37	0.60	0.66	0.56	252
21	2.71	0.98	3,753	4,231	4,432	4.46	11.44	1.92	2.12	1.42	1.38	0.60	0.65	0.56	258
22	3.00	1.25	3,604	4,203	4,307	5.26	12.96	2.54	2.16	1.55	1.39	0.60	0.64	0.56	253
23	2.86	1.20	3,069	4,153	4,638	4.87	9.93	2.35	2.16	1.46	1.39	0.60	0.66	0.57	243
24	2.94	1.15	3,962	4,145	4,439	5.09	11.85	2.16	2.10	1.51	1.38	0.60	0.68	0.58	242
25	3.09	1.24	4,005	4,140	4,312	5.18	11.87	2.22	2.12	1.62	1.40	0.60	0.66	0.57	237
26	3.28	1.44	3,930	4,132	4,418	5.14	13.50	2.94	2.21	1.80	1.43	0.60	0.67	0.58	228
27	2.97	1.38	3,786	4,119	4,863	5.46	12.47	2.52	2.25	1.64	1.46	0.60	0.71	0.58	227
28	2.77	1.26	3,530	4,098	4,801	5.26	11.83	2.39	2.27	1.60	1.48	0.60	0.76	0.58	208
29	2.71	1.24	3,852	4,089	4,922	5.15	12.18	2.28	2.26	1.57	1.50	0.60	0.80	0.56	200
30	2.53	1.04	4,376	4,099	5,173	5.19	11.80	1.98	2.21	1.43	1.50	0.60	0.82	0.55	197
31	2.37	0.82	4,642	4,116	5,152	4.66	11.62	1.76	2.16	1.42	1.50	0.60	0.79	0.53	192

Clifton Court Cl(mg/l)=200X EC - 25 e = Estimated

N.R. = No Record.

N.C. = Not computed due to insufficient data.

f = Excess Delta conditions with fish concerns.

r = Excess delta conditions with export/inflow ratio c dm = Daily Mean

s = Balanced water conditions with storage withdraw md = Mean Daily

Table 34. Pesticides, Herbicides, and Other Organic Substances Detected In the SWP

October 2002

Sampling Location	Sample Date 1/	Chemical Detected	Concentration µg/l 2/
North Bay Aqueduct At Barker Slough Pumping Plant	September 18, 2002	2,4-D	0.32
	September 18, 2002	Styrene	0.7
	September 18, 2002	2,4-Dichlorophenylacetic acid (DCAA)	0.99
California Aqueduct At Banks Pumping Plant	September 18, 2002	2,4-D	0.22
	September 18, 2002	Styrene	0.8
	September 18, 2002	2,4-Dichlorophenylacetic acid (DCAA)	0.89
O'Niell Forebay Outlet Check 13	September 18, 2002	2,4-Dichlorophenylacetic acid (DCAA)	0.87
	September 18, 2002	2,4-D	0.17
Delta Mendota Canal At McCabe Road	September 18, 2002	2,4-D	0.18
	September 18, 2002	2,4-Dichlorophenylacetic acid (DCAA)	0.96
California Aqueduct Near Kettleman City (Check 21)	September 17, 2002	2,4-Dichlorophenylacetic acid (DCAA)	0.97
	September 17, 2002	2,4-D	0.11
California Aqueduct At Near Highway 119 (Check 29)	September 24, 2002	2,4-Dichlorophenylacetic acid (DCAA)	1.00
	September 24, 2002	2,4-D	0.11
California Aqueduct At Tehachapi Afterbay (Check 41)	September 18, 2002	2,4-Dichlorophenylacetic acid (DCAA)	0.83
	September 18, 2002	Chlorpyrifos	0.1

1/ Locations are normally sampled during March, June, and September. Monthly reports will include data for the month in which samples were most recently taken.

2/ Micrograms per liter.

Table 35. Oroville and Delta Field Divisions Energy Data

(in kWh)

October 2002

Date	Oroville Thermalito Complex		Barker Slough Pumping Plant	Cordelia Pumping Plant Load	Banks Pumping Plant		South Bay Pumping Plant Load	Del Valle Pumping Plant Load
	Generation	Load			Total Load	SWP Load		
1	3,995,136	0	29,778	27,230	1,349,376	1,349,376	270,810	185
2	2,992,896	0	32,802	28,063	1,274,304	1,274,304	278,895	187
3	2,953,152	0	24,563	26,257	1,014,144	1,014,144	253,885	193
4	4,144,896	0	25,501	29,330	1,088,832	1,088,832	278,560	200
5	4,584,960	0	22,050	21,917	753,024	753,024	278,335	205
6	4,824,576	0	24,262	28,826	695,616	695,616	252,430	210
7	4,135,104	0	25,466	29,386	563,904	563,904	283,355	232
8	4,246,560	0	35,294	32,053	494,400	494,400	266,340	236
9	2,960,352	0	31,486	31,570	523,008	523,008	280,055	213
10	3,288,672	0	26,600	25,354	518,400	518,400	245,385	77
11	3,814,848	0	29,407	28,245	517,440	517,440	259,635	75
12	3,196,800	0	30,653	28,126	470,592	470,592	269,665	182
13	2,777,760	0	30,156	28,994	623,040	623,040	255,570	185
14	2,499,552	0	28,980	28,966	291,840	291,840	268,525	187
15	3,163,680	0	27,384	27,286	514,176	514,176	241,840	197
16	3,356,064	0	25,977	25,781	515,520	515,520	120,715	179
17	3,127,968	0	26,761	28,147	516,864	516,864	152,930	183
18	3,083,040	0	25,550	26,082	663,360	663,360	190,990	181
19	2,984,256	0	24,906	24,857	597,696	597,696	280,500	187
20	2,508,768	0	25,151	26,719	596,160	596,160	280,610	192
21	2,798,496	0	25,984	25,970	890,496	890,496	280,525	189
22	2,935,008	0	27,223	27,286	1,242,624	1,242,624	280,510	183
23	3,139,776	0	26,096	26,649	1,083,840	778,840	280,570	182
24	3,136,608	0	21,714	21,385	1,128,768	823,768	280,680	176
25	3,137,472	0	17,857	17,444	998,976	693,976	280,645	179
26	3,091,968	0	21,357	19,075	1,001,856	696,856	280,725	178
27	3,273,984	0	21,294	19,642	1,353,600	1,048,600	292,495	191
28	3,089,664	0	21,266	18,130	1,562,112	1,257,112	261,870	186
29	3,144,960	0	19,215	16,975	2,483,520	960,520	189,830	186
30	3,148,416	0	15,386	19,215	2,275,392	752,392	133,705	185
31	3,120,768	0	11,529	14,308	2,305,920	1,087,920	1,020	237
Total	102,656,160	0	781,648	779,268	29,908,800	23,814,800	7,571,605	5,758

Table 36. San Luis Field Division Energy Data

(in kWh)

October 2002

Date	Dos Amigos Pumping Plant		Gianelli Pumping-Generating Plant			
	Total Load	SWP Load 1/	Total Generation	SWP Generation 1/	Total Load	SWP Load 1/
1	1,201,392	1,201,392	1,209,312	1,209,312	1,015,200	-13,800
2	1,172,736	1,172,736	1,025,568	1,025,568	1,289,952	-33,048
3	1,126,224	1,126,224	1,021,248	1,021,248	586,656	-1,344
4	1,112,832	1,112,832	873,216	873,216	866,592	-15,408
5	1,306,656	1,306,656	228,384	228,384	779,904	-4,096
6	1,362,672	1,362,672	1,196,064	1,196,064	717,984	-17,016
7	1,157,616	1,157,616	1,906,560	1,906,560	1,065,888	-12,112
8	1,021,536	1,021,536	1,344,672	1,344,672	684,864	-1,136
9	1,014,480	1,014,480	1,070,784	1,070,784	1,181,376	299,376
10	910,800	910,800	1,069,920	1,069,920	1,099,872	315,872
11	1,075,680	1,075,680	1,389,024	1,389,024	772,704	-11,296
12	1,104,624	1,104,624	1,011,168	1,011,168	771,552	-12,448
13	1,204,992	1,204,992	715,392	715,392	1,061,568	-16,432
14	943,056	943,056	1,114,848	1,114,848	340,416	-2,584
15	799,056	799,056	914,976	914,976	769,248	-14,752
16	954,432	954,432	908,064	908,064	856,800	-25,200
17	834,048	834,048	802,656	802,656	957,888	75,888
18	804,816	804,816	1,135,584	1,135,584	1,210,176	328,176
19	911,808	911,808	851,328	851,328	853,344	-8,656
20	1,067,760	1,067,760	0	0	2,145,024	33,024
21	861,984	861,984	1,184,256	1,184,256	860,256	-19,744
22	867,456	867,456	733,536	733,536	1,140,768	40,768
23	956,160	956,160	521,280	521,280	810,720	18,720
24	883,728	883,728	346,464	346,464	1,186,272	-1,728
25	861,696	861,696	1,157,760	1,157,760	1,180,224	36,224
26	889,776	889,776	849,888	849,888	1,001,088	11,088
27	1,100,592	1,100,592	0	0	2,782,944	32,944
28	698,256	698,256	1,325,088	1,325,088	1,175,040	141,040
29	770,544	770,544	0	0	1,773,504	101,504
30	697,248	697,248	0	0	1,524,096	6,096
31	657,072	657,072	0	0	1,796,544	-51,456
Total	30,331,728	30,331,728	25,907,040	25,907,040	34,258,464	1,178,464

1/ Negative values may appear in SWP columns and indicate a mismatch of scheduled CVP energy and actual pumping; adjustments to SWP water shares are made to balance the mismatch.

Table 37. San Joaquin Field Division Pumping Plant Energy Load Data

(in kWh)

October 2002

Date	Coastal Branch					California Aqueduct			
	Las Perillas	Badger Hill	Devils Den	Bluestone	Polonio	Buena Vista	Teerink	Chrisman	Edmonston
1	20,782	56,272	64,620	61,812	64,512	1,293,480	1,372,680	3,040,416	11,201,040
2	23,084	62,528	70,668	67,050	70,722	1,267,056	1,377,936	3,039,552	11,071,440
3	25,840	72,232	85,752	82,710	82,854	1,212,192	1,312,560	2,946,816	10,715,040
4	23,070	64,544	79,218	76,284	78,570	1,044,936	1,125,576	2,488,320	8,812,080
5	17,736	50,040	87,930	84,600	84,366	1,519,128	1,660,320	3,716,352	14,099,040
6	13,474	36,048	100,818	95,436	99,504	1,785,528	1,974,024	4,438,368	16,282,800
7	11,108	27,256	67,950	64,800	67,320	1,105,920	1,225,728	2,727,360	9,900,720
8	16,878	45,168	90,630	87,120	87,930	1,073,088	1,157,400	2,549,088	9,289,440
9	22,706	62,264	78,966	75,006	75,474	1,043,640	1,096,200	2,454,336	8,961,120
10	25,282	65,928	111,456	107,280	112,680	903,600	1,021,680	2,225,952	8,066,160
11	24,740	65,584	76,230	72,504	73,962	984,096	1,090,944	2,410,272	8,673,120
12	29,762	81,912	76,482	74,142	75,852	1,099,152	1,175,400	2,590,848	9,547,920
13	30,396	85,096	117,090	111,078	114,156	1,245,168	1,425,312	3,195,648	12,044,160
14	22,292	60,064	61,398	58,536	61,974	850,176	918,288	2,007,648	7,053,840
15	29,190	80,248	87,570	84,672	84,060	771,408	858,024	1,829,952	6,446,160
16	30,290	83,112	68,418	66,222	69,228	796,896	872,064	1,896,192	6,991,920
17	26,736	74,512	91,476	88,596	87,426	822,240	892,872	1,948,608	6,924,240
18	20,008	54,664	57,654	53,784	56,916	695,376	723,960	1,576,512	5,777,280
19	25,042	67,000	93,240	87,516	92,232	943,272	1,032,192	2,268,576	8,439,840
20	15,792	42,904	60,246	55,998	60,570	1,169,424	1,297,656	2,925,504	10,577,520
21	14,286	35,312	59,994	57,492	60,192	884,808	1,003,752	2,208,384	8,027,280
22	13,232	36,200	59,562	55,962	59,256	962,712	1,018,728	2,278,080	8,379,360
23	17,472	47,920	67,788	63,954	67,392	921,096	1,045,368	2,301,696	8,182,800
24	17,246	45,704	60,606	58,392	60,138	912,888	971,568	2,186,784	8,051,760
25	15,768	44,352	62,352	58,680	60,840	888,480	998,136	2,213,280	8,128,080
26	14,842	38,752	66,726	61,992	67,680	993,168	1,152,288	2,592,000	9,591,840
27	9,054	24,320	48,042	46,242	49,410	1,326,672	1,405,080	3,121,056	11,444,400
28	7,258	18,000	24,102	21,744	24,030	888,264	1,031,832	2,285,856	8,322,480
29	3,802	10,136	1,800	1,800	1,476	918,936	996,048	2,222,496	8,246,160
30	816	944	1,908	1,854	1,422	791,208	904,176	2,011,968	7,351,920
31	806	720	2,628	1,764	1,422	760,032	820,296	1,826,496	6,708,240
Total	568,790	1,539,736	2,083,320	1,985,022	2,053,566	31,874,040	34,958,088	77,524,416	283,309,200

Table 38. Southern Field Division Energy Data

(in kWh)

October 2002

Date	West Branch			East Branch			
	Oso Pumping Plant Load	Warne Powerplant Generation	Castaic Powerplant SWP Generation	Alamo Powerplant Generation	Pearblossom Pumping Plant Load	Devil Canyon Powerplant Generation	Mojave Siphon Powerplant Generation
1	438,984	1,161,504	1,920,000	360,276	1,917,396	3,441,792	214,662
2	383,936	1,233,576	1,920,000	381,136	2,026,332	3,287,616	249,753
3	388,136	1,182,600	1,920,000	358,988	2,031,624	3,210,240	274,575
4	381,248	1,092,600	1,920,000	274,148	1,544,400	3,305,856	168,189
5	929,656	597,024	1,920,000	323,176	1,454,484	3,119,328	158,550
6	844,144	1,674,360	1,920,000	414,596	2,372,064	3,457,920	264,768
7	424,648	1,078,056	1,440,000	310,016	1,778,196	3,438,912	241,143
8	340,368	940,032	1,440,000	291,536	1,746,972	3,032,736	214,179
9	297,304	904,824	1,440,000	287,560	1,572,396	3,083,904	188,979
10	310,576	950,256	1,440,000	265,720	1,551,288	3,121,824	158,991
11	298,704	991,656	1,440,000	291,312	1,546,284	3,347,904	184,716
12	338,856	888,192	1,440,000	323,288	1,874,124	3,038,208	233,688
13	465,472	936,216	1,440,000	404,740	2,142,912	3,129,888	219,597
14	197,904	792	0	262,696	1,388,892	3,302,592	189,168
15	93,128	0	0	232,596	1,551,336	2,949,408	181,482
16	99,848	0	0	269,220	1,572,384	3,050,016	185,493
17	99,848	0	0	276,668	1,580,724	2,967,072	200,928
18	90,608	0	0	227,696	1,396,032	2,981,664	157,122
19	187,096	745,992	1,344,000	356,020	1,833,072	3,076,704	203,133
20	468,832	928,872	1,344,000	349,468	1,695,444	2,772,096	191,499
21	240,520	975,816	1,440,000	305,060	1,733,196	2,805,600	184,086
22	379,008	577,800	1,440,000	235,200	1,469,520	2,796,192	177,828
23	350,280	975,384	1,440,000	268,912	1,451,892	2,833,152	152,250
24	348,544	977,472	1,440,000	240,212	1,346,568	2,879,232	171,087
25	319,816	970,632	1,440,000	248,472	1,396,452	2,824,800	170,730
26	462,784	915,768	1,440,000	265,188	1,590,180	2,582,400	188,286
27	641,312	988,920	1,500,000	316,820	1,674,624	2,903,712	151,263
28	295,400	868,392	1,440,000	107,408	1,427,352	2,916,960	193,830
29	298,424	883,368	1,440,000	0	1,431,576	2,684,928	176,988
30	297,472	890,640	1,440,000	0	1,296,972	2,597,568	149,793
31	285,432	922,032	1,440,000	0	1,194,792	2,713,344	142,422
Total	10,998,288	25,252,776	40,188,000	8,248,128	50,589,480	93,653,568	5,939,178